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Professional Builder

A CAHNERS PUBLICATION
DECEMBER 1989

The Builder Of The Year
Peter M. Ochs
Participatory Management
Pioneer

What To Sell In 1990:

Our 16th Consumer Survey

Achievement Award Winners:
Pacesetters Of 1989

QVA House: California Value

Complying With HUD's Ad Rules

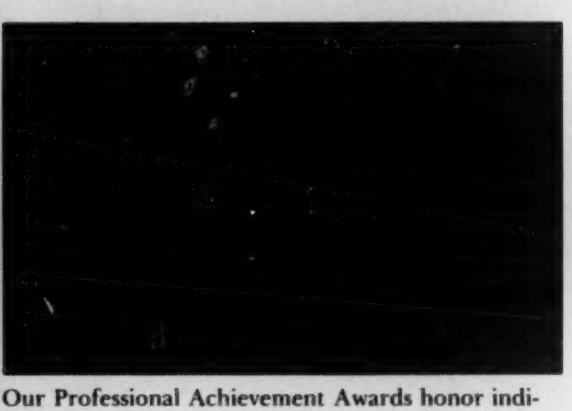
DECEMBER • 1989

Professional Builder

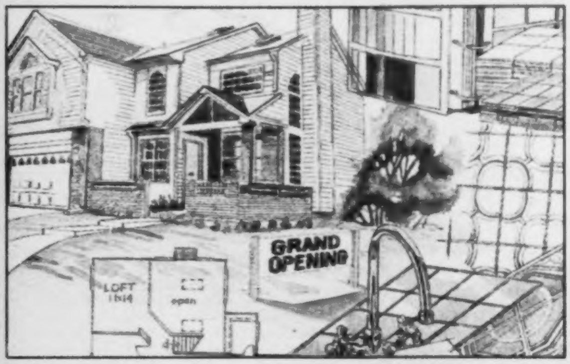
VOL. 54

THE MAGAZINE OF HOUSING AND LIGHT CONSTRUCTION/A CAHNERS PUBLICATION

The Builder Of The Year, Peter Ochs, has made it a point to listen to his employees. His management style has made Fieldstone Co. a leader. Page 82.



Our Professional Achievement Awards honor individuals for their efforts in affordable housing, design, diversification and more. Page 90.



Before you sign off on new floor plans, take a look at what home shoppers say they want in their next house. Our 16th Consumer Survey, page 100.

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The Builder Of The Year 82

Peter M. Ochs, 46, has lead his Fieldstone Co. to annual revenues of $330 million in just 8 years. That's impressive in itself. But how he has led his company is the reason *Professional Builder* names Ochs the 1989 Builder Of The Year.

PB's 1989 Professional Achievement Award Winners 90

This was a tough year for many builders and the home building industry itself faced some difficult challenges. Generally, 1989 starts and sales were down compared to the previous year. *Professional Builder* recognizes 11 individuals for their success and contributions to the housing industry in 1989.

16th Annual Consumer Survey 100

Here's a detailed blueprint of what home buyers want in their next house. Find out what they need in the kitchen and the baths, where they want the master bedroom, how much they can afford to pay each month and their motivations for buying. Survey results show housing needs by market—first-time, move-up and move-down home buyers and retirees.

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Careful land planning and attention to detail at California Reflections in Orange County, Calif., turned out a QVA winner for Kaufman & Broad.

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Fireside Home Remodeling built living quarters on the top floor of a 200-year-old mill. The firm provided all the modern conveniences but retained the historical feeling of the original building.

On the Cover

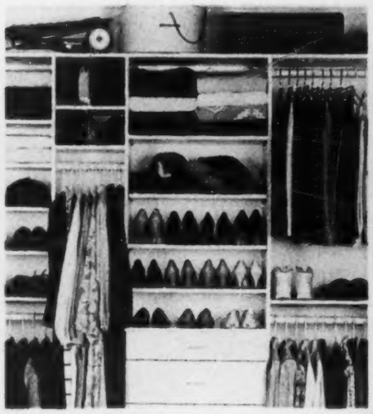
Marc Berlow photographed The Builder Of The Year, Peter Ochs, at Fieldstone Co. headquarters in Newport Beach, Calif.

Professional Builder

THE MAGAZINE OF HOUSING AND LIGHT CONSTRUCTION/A CAHNERS PUBLICATION

Research house shows new building technologies, page 54.

Don't expect a housing bill before 1990. That's the word from Capitol Hill. Page 22. **Housing legislation has had to take a back seat to more urgent matters** — specifically the clean up of the thrift mess and putting HUD back in order. Page 26. **Will your advertisements bring you lawsuits rather than home buyers?** One Maryland developer settled out of court with a group that felt the ads were discriminatory. Here's how to stay on the right side of HUD's Fair Housing rules for advertising. Page 35. **Marketing to seniors** takes common sense. Page 39. Putting models in the right place can pay off. Page 40.



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***The* Professional Builder**

16th Annual Consumer Survey

WHAT 1990 BUYERS WANT IN HOUSING

Written by Eric L. Benderoff, Staff Editor

Home buyers are tough to please. They want their next house to be perfect. That's why builders offer product options, color choices and different elevations. Home buyers want to individualize. The information compiled on the following 16 pages is intended to help builders give buyers exactly what they want. And this, The *Professional Builder* 16th consumer survey, reflects what consumers want in housing as we head into the '90s.

This summer, PB asked National Family Opinion, an independent research firm, to survey a representative 1035 households that said they expected to buy a new home in the next six months. This survey is based upon 814 households, a 78.6 percent response. In addition, The PB research arm, the Bureau of Building Marketing Research, surveyed 324 home builders on business practices and what works in their best-selling model homes.

The complete surveys, which contain considerably more information than we have space to report, can be purchased for $450. The consumer and builder surveys are also available separately for $320 each. Send a check or money order to:

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1350 E. Touhy Ave.,
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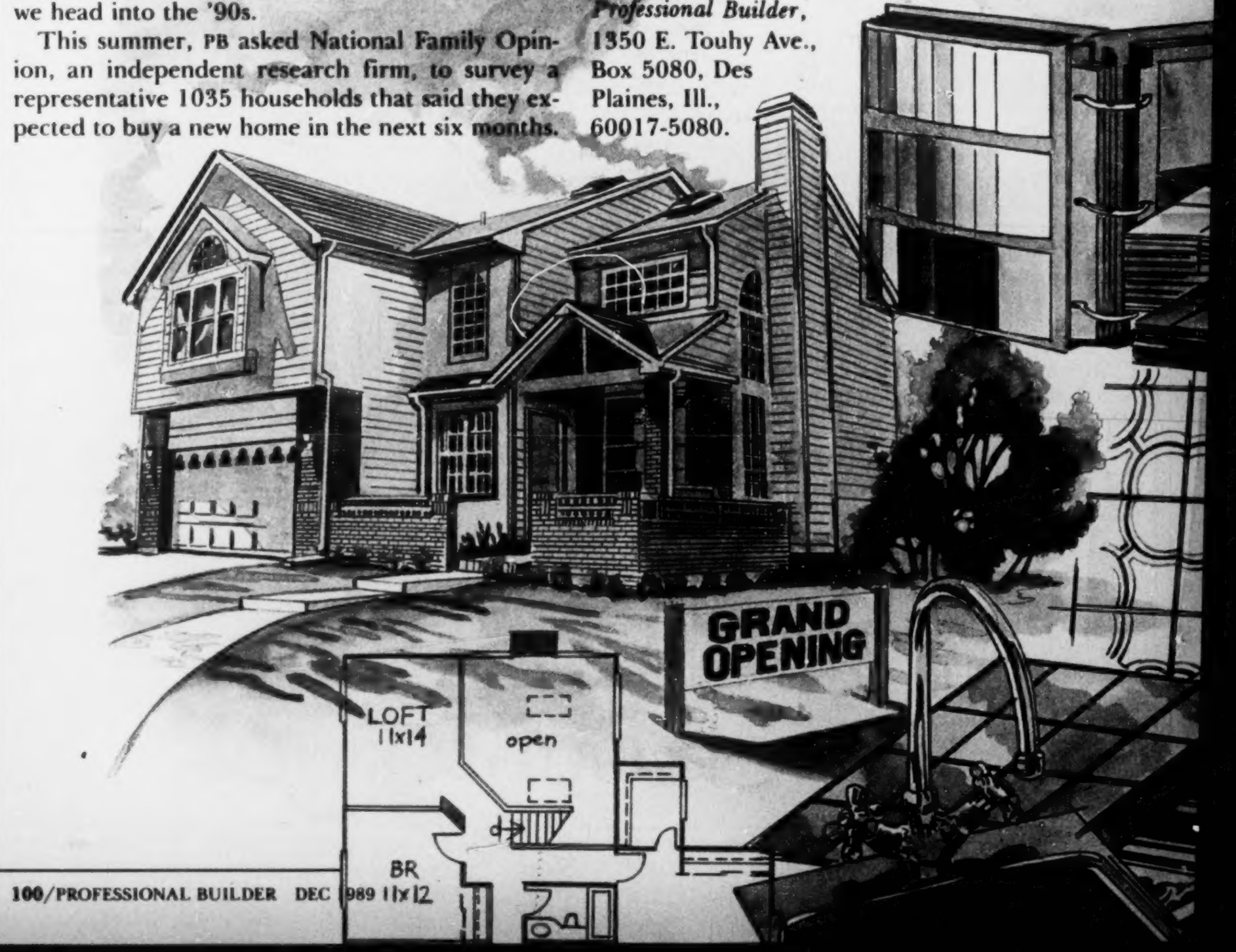
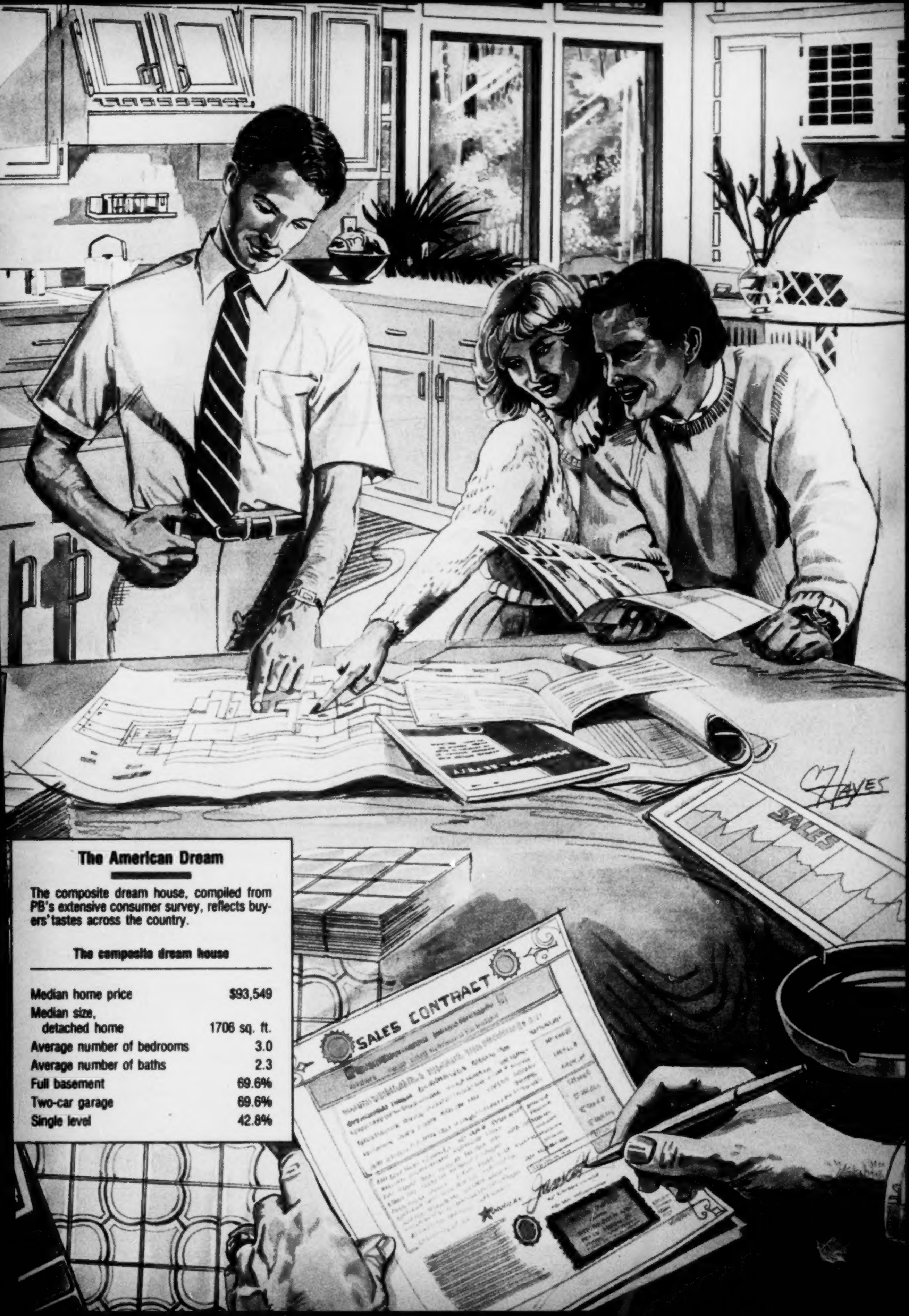




The American Dream

The composite dream house, compiled from PB's extensive consumer survey, reflects buyers' tastes across the country.

The composite dream house

Median home price	$93,549
Median size, detached home	1706 sq. ft.
Average number of bedrooms	3.0
Average number of baths	2.3
Full basement	69.6%
Two-car garage	69.6%
Single level	42.8%

MONEY & MOTIVATION

Buyers Want More Space

The median price retirees could afford for a new house is $86,200. But 28% of retirees cannot afford more than $65,000 for a new house.

Real estate is local. That truism is validated by the affordable housing crisis. While it is true that home buyers in some markets—notably San Francisco, Washington, D.C., and Boston, in particular—cannot afford to own a home, most home shoppers can.

Nationally, 36 percent of all home shoppers say a wide selection of affordable for-sale housing is available in their area. And 46 percent say it is available but very hard to find.

In 1990, builders of affordable housing will have to call attention to themselves.

It is not the downpayment that is a big concern to most buyers. Rather, it is the cost of the house and the monthly payment that rank as the factors most important in the buying decision.

And why do buyers look for new homes? It depends in part on who is looking. Move-up home buyers want a larger home and a better location, while empty-nesters want a smaller home with less maintenance.

And how much will they pay? Again, that depends on the buyer. The median price move-up buyers expect to pay is $122,000, with a median downpayment of $30,000. That downpayment is 20 percent higher than last year when move-up's paid $25,000 down on a $114,000 house. First-time buyers, of course, are different. Last year, first timers paid a median of $10,000 for a downpayment on a $77,999 house. This year, they expect to pay more for the house, $80,399, but the same $10,000 for a downpayment.

Economists and housing experts say the biggest market for new home sales in 1990, as in the past few years, is the move-up buyer. And as the above figures indicate, move-ups have a healthy checkbook. What they want to buy is a better designed home, 52.5 percent said. Building equity (43.8 percent) and more space for a growing family (42.9 percent) are additional needs.

House Size = Price Paid

As might be expected, the size of the house is directly related to the price paid. However, in the $100,000 to $199,999 price range, buyers only expect 100 square feet more. On average, first-time buyers expect a 1613-square-foot house, but 15% of first timers don't know what their money will buy.

Less than $85,000	1482 square feet
$85,000 to $99,999	1776 square feet
$100,000 to $149,999	1976 square feet
$150,000 to $199,999	2098 square feet
$200,000 to $300,000	2438 square feet
More than $300,000	2686 square feet

Government Should Aid First Timers

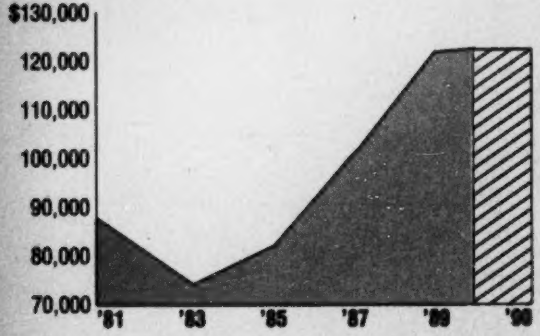
According to all consumers the government should help first-time buyers afford a house. Most home shoppers think the government should not subsidize builders for affordable housing projects, but aid the buyers.

Should government help first-time buyers?	% all consumers
● Yes, encourage finance plans with low downpayments.	21.8%
● Yes, offer finance plans that keep payments lower.	18.8
● Yes, provide tax savings for downpayment.	13.2
● Yes, subsidize mortgage interest rates.	12.2
● Yes, should help builders provide affordable housing.	8.3
● No.	28.8

Housing Costs Soar In The '80s

The cost of housing rose 36% from 1981 to 1989 and 67% from 1983. In 1990, consumers are willing to pay an average price of $121,145. The median price home buyers expect to pay is $93,549. According to the Commerce Department, the cost of a median priced house as part of total income is decreasing. In 1983 homeowners spent 30.1% of their income on housing. In 1988, consumers spent 22.1%. This decrease is due to falling interest rates.

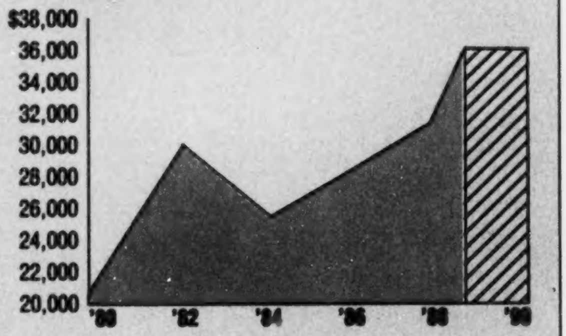
Average cost buyers expect to pay



Downpayment Dollars Nearly Double

As housing costs rose, so did the amount needed for a downpayment. Since 1980, consumers are paying 75% more for downpayments. In 1990, first-time buyers can pay an average downpayment of $16,455, up $962 from last year. And move-up buyers can pay an average of $49,819, up a whopping $11,453 from 1989. In 1990, the median downpayment for first timers is $10,000 and the median downpayment for move ups is $30,000.

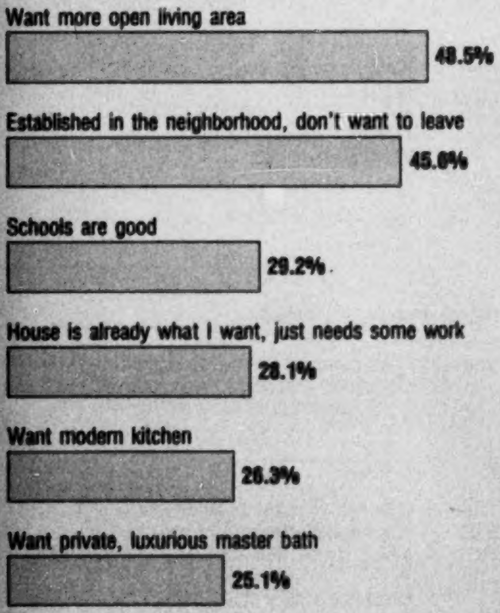
Average downpayment dollars for all buyers



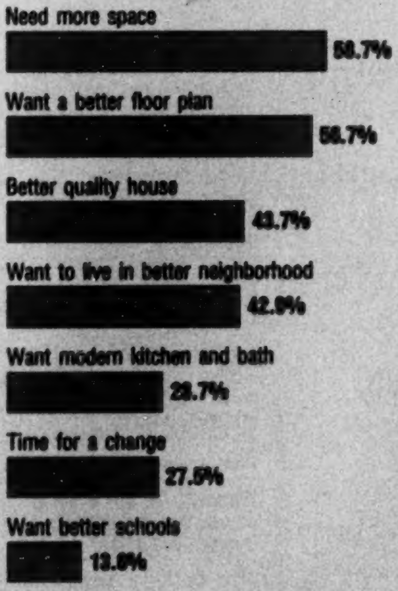
The Remodeling Option

Move-up buyers were asked what factors would motivate them to remodel their current house as opposed to moving if the cost was equal. Buyers wanted to stay in their established neighborhood if they could increase space, and they would move for a better neighborhood and more space.

For same dollar, why remodel?



For same dollar, why buy a new house?

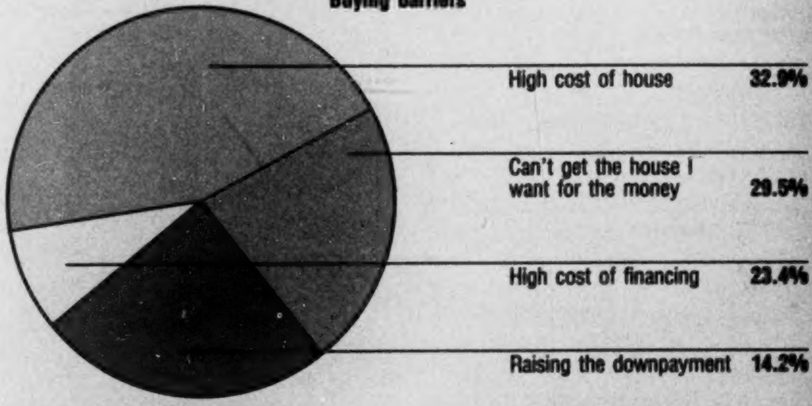


MONEY & MOTIVATION

Obstacles To Home Ownership

The rising cost of home ownership is making it difficult for consumers to buy and many consumers say the house they want is too expensive.

Buying barriers



Interest Rates Matter Most

When consumers decide to buy a house now, it's because of lower interest rates and finding affordable monthly payments. Move-up buyers are most apt to make their decision on lower interest rates (73.5%) and first-time buyers want affordable monthly payments (72.6%).

Reasons for buying now	% all consumers
Decrease in mortgage rates	61.0%
Affordable monthly payments	56.6
Inheritance	30.6
Less expensive housing available	28.2
Drastic change in lifestyle	22.5
Tax reform	21.7
Guarantee on home quality	19.8

If The Price Is Right

When consumers say it's time to buy, they care primarily about the cost of the house, not the downpayment. But the monthly payment looms large. To the majority of retirees, empty nesters and move-up buyers, price mattered most. But to first timers, the monthly payment is most important.

Most important buying decision	% all consumers
Price of house	43.7%
Monthly payment	31.0
Other financial concerns	11.5
Mortgage interest rate	10.1
Downpayment	4.8

Impact Of Mortgage Interest Deduction

The federal government is considering eliminating the mortgage interest deduction from the income tax. Builders and consumers agree this will impact new home sales, but will sales decrease? More than 60% of first timers say owning a house will be more difficult and 70% of builders agree.

Consumers:

What will be the effect of eliminating the mortgage interest deduction?	% all consumers
Make owning a house more difficult	46.5%
No affect on ability to own a house	45.6
Seek another tax shelter	24.0
Less likely to buy a house	15.8

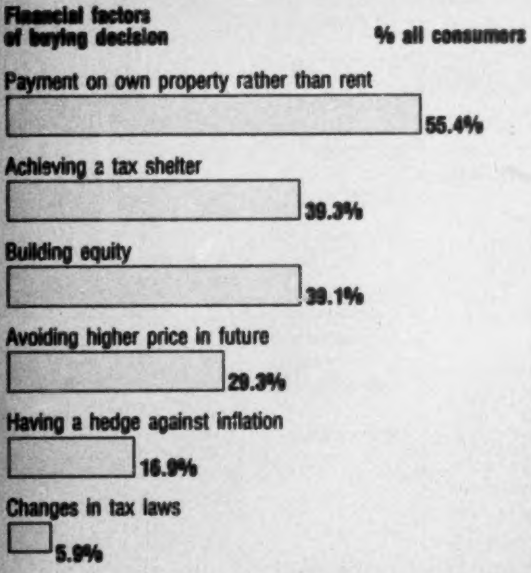
Builder:

How will removal of mortgage interest deduction affect your ability to sell new homes?	% builders
Make home sales more difficult	70.9%
Home sales will increase	60.9
Have no effect on home sales	8.1

To reduce the cost of housing, 42.3% of builders said land use restrictions should be relaxed and 36.9% said higher density units should be built.

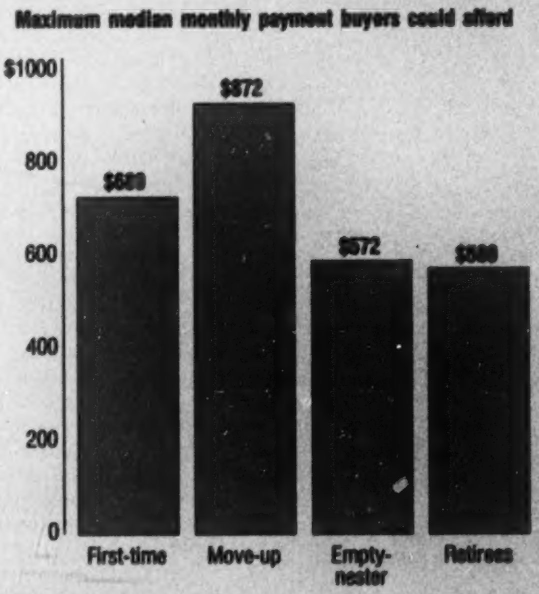
No More Landlord

Consumers buy homes for many financial reasons, but the most important factor is to pay for own property rather than renting. Building equity is most important for move-up buyers (44.0%), and empty nesters (36.8%) and retirees (37.5%) wanted to avoid higher housing costs in the future.



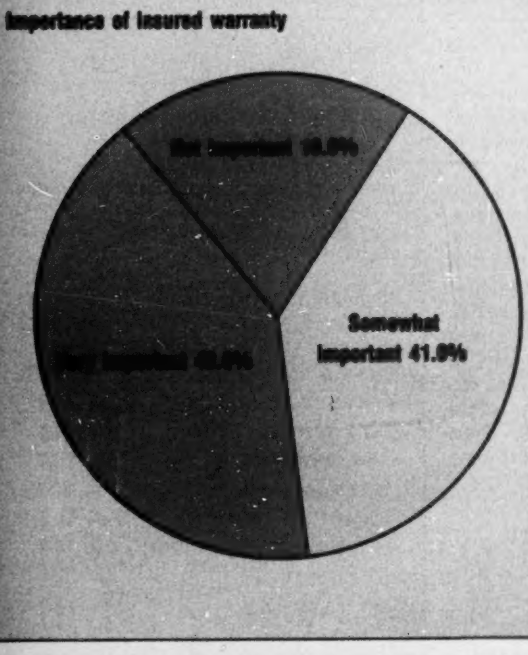
How Much Each Month?

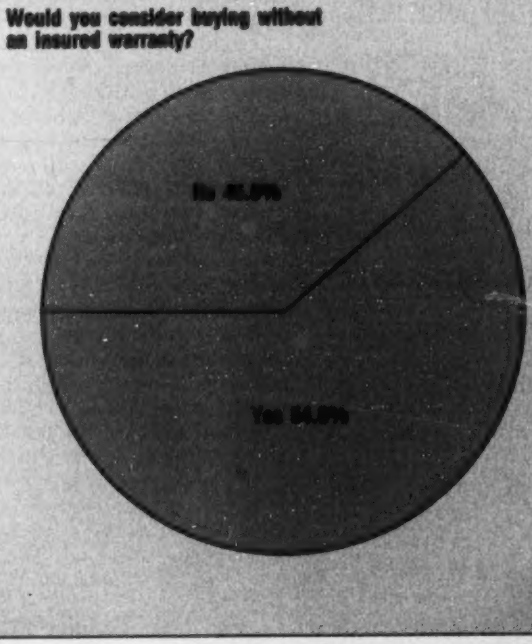
The monthly payment is a key factor in affording new housing. The median house bill all consumers could afford is $714 a month. Move ups could afford the most ($872), and surprisingly first timers could afford the second most ($689). Nearly 40% of move-up buyers could afford more than $1000 a month.



Warranties Important, But Not Necessary

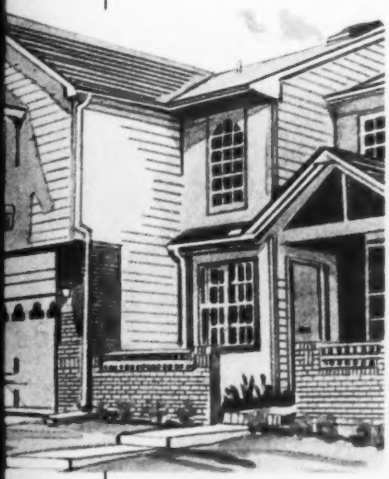
Nearly all consumers (90%) say an insured warranty is important in whether they decide to buy. And 46% would not buy a house without an insured warranty.





DESIGN

Make Room For Space



Said comedian Billy Crystal: "It's not how good you feel, it's how good you look." Today's house better look good. Home shoppers demand it.

In fact, given the choice of upgraded design and quality amenities or a larger lot, buyers chose the amenities. But asked to choose between a small house with quality amenities or a bigger house with fewer amenities, buyers would take the larger house, figuring they could add the amenities later. Those shopping for an attached home opted for the amenities, however.

In 1990 buyers will be looking for more space. When asked what design elements are most important in a new home, shoppers chose linen closets, garage storage space and a kitchen pantry. And when asked what motivates consumers to move up, they said a better designed home, followed closely by more room for a growing family.

Asked to choose two features for their new home, shoppers chose an extra bedroom (58 percent) and bath (57 percent) over a fireplace (47 percent), whirlpool tub (21 percent) and volume ceilings (13 percent). First-time home buyers wanted an extra bedroom most. Move ups, empty nesters and retirees opted for an extra bathroom.

Throughout the '80s, "bath" has been a buzzword. Buyers wanted a big master suite with deluxe bathroom features. Since 1975, when PB conducted its first consumer survey, actual bathrooms have increased in number. For instance, in 1975 home buyers in the lowest price bracket (homes costing less than $25,000) expected 1.6 bathrooms in a new home. In 1990, buyers in the lowest price bracket (now less than $85,000) will want at least two baths. This is significant because buyers said they want a minimum of two baths in any new home. In 1975, no buyers expected three baths, whereas in 1990 the highest-end buyer (more than $300,000) will expect three baths.

Home shoppers are more willing to buy an attached home today than in 1978. Then, 97.4% of buyers wanted a detached home. Now, 83.5% want a detached home.

More Space In Family Areas

If home buyers could enlarge any particular areas in their new house, they would add closet space and increase the size of the family areas, like the kitchen and family room.

Areas consumers would enlarge	% all consumers
Living areas	
Family room	38.9%
Living room	23.6
Dining room	12.1
Bonus room	11.3
Kitchen	
Meal preparation area	45.3%
Eating space	30.9
Master suite	
Closet	39.4%
Bathing area	23.1
Sleeping space	14.1
Sitting room	8.4
Other	
Office/hobby room	23.3%
Secondary bedrooms	15.1
Secondary bathrooms	7.5

What Makes Attached Work?

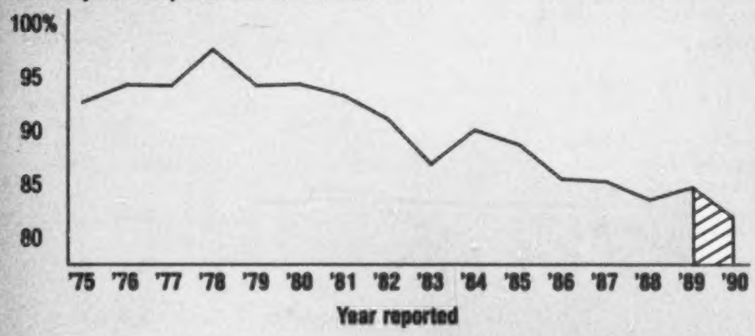
Buyers who prefer detached homes were asked what features an attached home needs to make it more acceptable. The top features were those that made the home seem detached.

What makes an attached home acceptable?	% all consumers
Privacy at rear of unit	39.0%
A sense of neighborhood	26.1
Sound control to omit noise	24.6
Energy saving features	24.3
Maintenance included in price	17.3
Situated in planned community	16.9
Recreational features available	16.0
Proven security	12.4
Common open space	11.3

Detached House Is Tops With Buyers

Since 1975 home buyers responding to PB's consumer survey overwhelmingly said they prefer a detached house (1 house on 1 lot) over an attached house. And they still do today, though that percentage is at an all-time low. A townhome is favored by buyers who prefer attached.

% of buyers who prefer detached homes



The Best Of The Rest

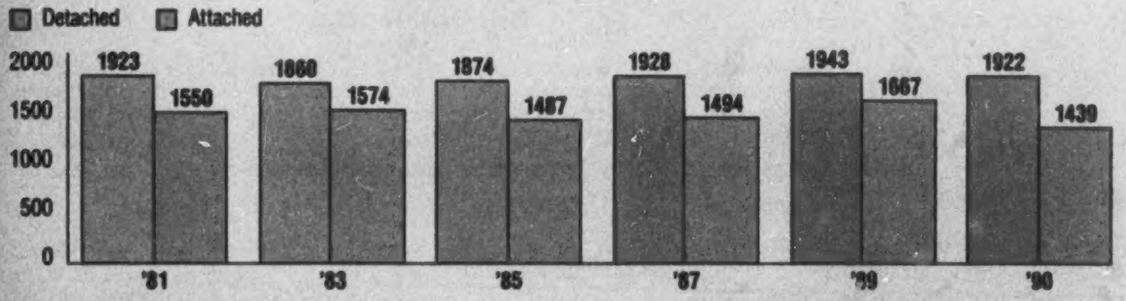
Though detached homes are slipping from favor, attached housing has a long way to go before it becomes acceptable to most consumers. Retirees (35.6%) and empty-nesters (34.4) are most likely to accept an attached unit.

Type of housing buyers prefer	% all consumers
Detached house	81.9%
Townhouse	5.0
Duplex	3.8
Condo, low rise	3.1
Condo, high rise	2.0

House Sizes Have Varied From Year To Year

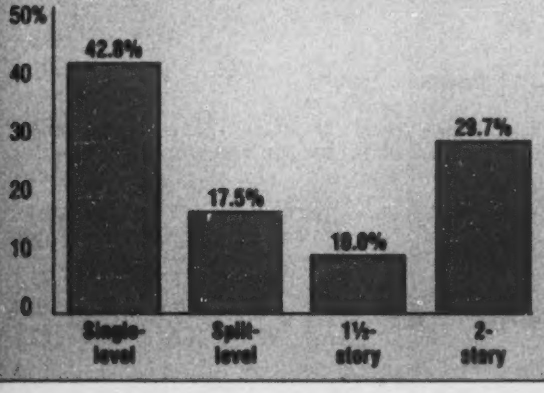
The '80s were an interesting decade for new housing. Since 1983, the cost of housing rose 67% but the size of housing has decreased and increased. Buyers of detached and attached homes expect to purchase a smaller home in 1990.

Average square footage buyers expected of detached and attached homes in the '80s



Single-Level Style Preferred In 1990

Since 1975, buyers have preferred a single-level style of house. In 1975, 51.8% of buyers wanted a single-level and today 42.8% wanted a single level. The difference is significant, but no other style is as popular.



Guarantee Energy And Quality

When a builder touts the energy features and quality of construction of a new home, only a handful of buyers will believe it. They would rather see the guarantee.

How consumers determine credibility of:	Energy	Quality
Ask for guarantee/warranty	62.3%	62.9%
Visual inspection	56.5	76.5
Ask for literature	48.4	32.4
Look for brand names	43.9	35.1
Ask others who bought from builder	43.0	59.9
Get independent evaluation	38.7	46.8
Compare with other homes	38.1	56.4
Take builders word for it	15.5	16.1
Not concerned	4.0	2.5

DESIGN

Housing Then And Now

Three Bedrooms For Detached House

The attached house averages fewer bedrooms today than in 1975. In 1990, only move-up and first-time buyers prefer homes with 3 or more bedrooms.

	1975	1990
Average number of bedrooms wanted in a detached house	3	3
Average number of bedrooms wanted in a attached house	2.5	2

Two-Car Garage Is No. 1

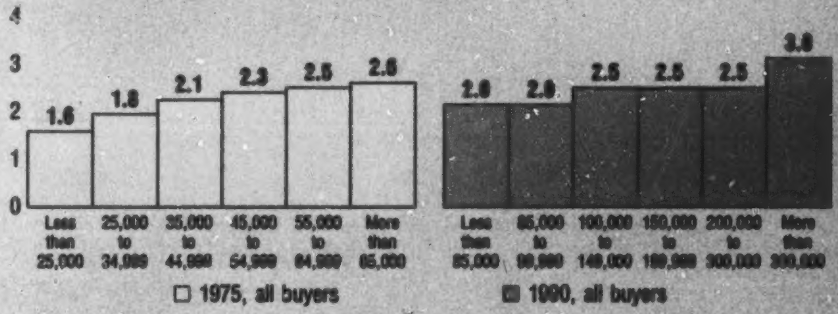
Overwhelmingly, all consumers preferred a 2-car garage over other styles. The 3-car garage is gaining popularity with move-up buyers; 23.1% want a 3-car garage.

Garage Space	% all consumers 1975	 1990
1-car	NA	9.4
1½-car	14.4	6.5
2-car	68.6	61.1
3-or-more-car	5.0	11.9
Carport	7.9	5.4

More Room To Bathe

Bathroom is a buzzword, no doubt about it. And today's home buyers want more baths than they did 15 years ago. In fact, buyers in any price range today want at least 2 baths. The chart indicates how many baths home buyers want for their money. Note that the 1975 chart is based on a vastly different price scale for the same type of housing.

Average number of bathrooms consumers want in detached homes



Full Basement Favorite

Whether it's a detached or attached home, all buyers prefer a full basement. And that opinion changed little in 15 years. However, more buyers in 1990 will opt for other basement options than they would in 1975.

Type of basement	Detached 1975	 1990	Attached 1975	 1990
Full basement	65.8	58.3	61.8	73.0
Crawl space	6.6	24.8	5.6	10.4
No basement	27.1	17.8	11.1	22.4

In 1975, a builder's best-selling model with land sold for $43,560. In 1990, builders expect their models to sell for $184,000. That's a 322% increase.

Traditional Architecture Is Buyer's Choice

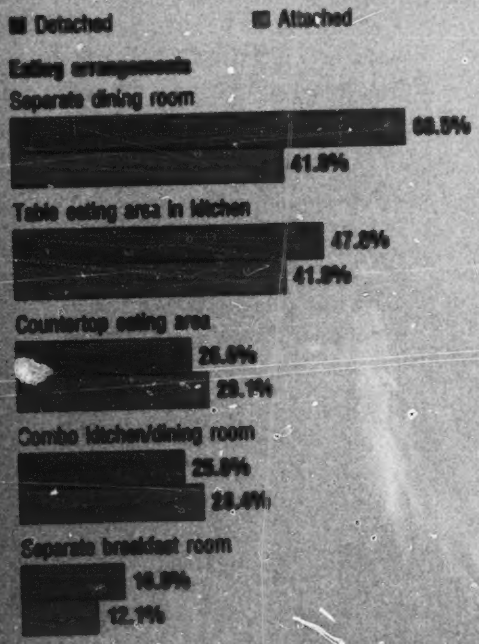
As in years past, traditional architectural style is the top selection for all consumers. Regionally, West Coast and New England home buyers prefer a contemporary style. In the Midwest, traditional is the overwhelming choice.

Architectural style	% all consumers
Traditional	37.5%
Contemporary	28.7
Colonial	13.1
Victorian	6.7
Other	5.7
Spanish	4.7
Tudor	3.5

Architectural style	Builders offer
Traditional	48.3%
Contemporary	25.9
Colonial	10.5
Spanish	8.8
Other	4.1
Tudor	1.7
Victorian	0.7

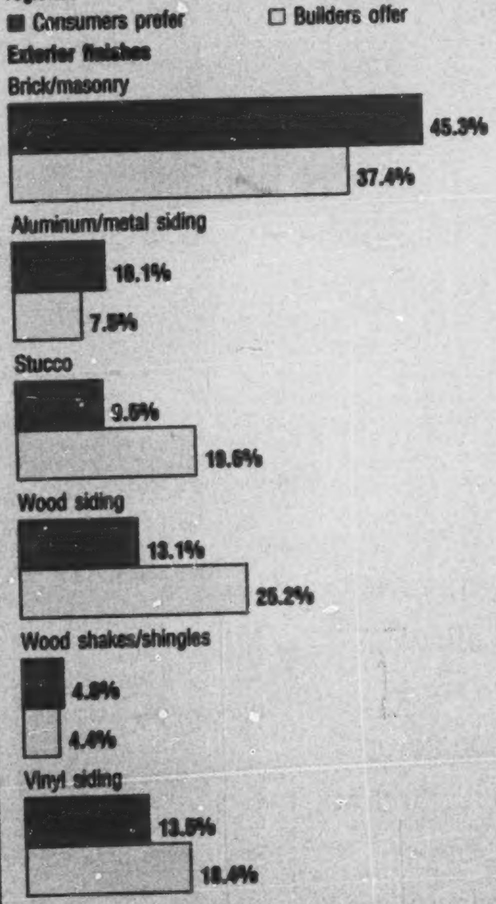
Consumers Want Separate Dining Room

When it's dinner time, most home buyers want to eat in a separate dining room. But they also want eating space in the kitchen. Attached-home buyers are just as likely to eat in the kitchen as the dining room, while detached-home buyers prefer the dining room.



Brick Favorite Exterior Finish

Regional tastes vary, but the overall favorite for a home's exterior finish is brick or masonry. In New England, wood shakes were the top choice, followed by vinyl siding and then brick. On the West Coast, stucco was number one, followed by brick with wood siding a close third. Brick is preferred in the Mid-Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central and Mountain regions.



Give Buyers A Good Value

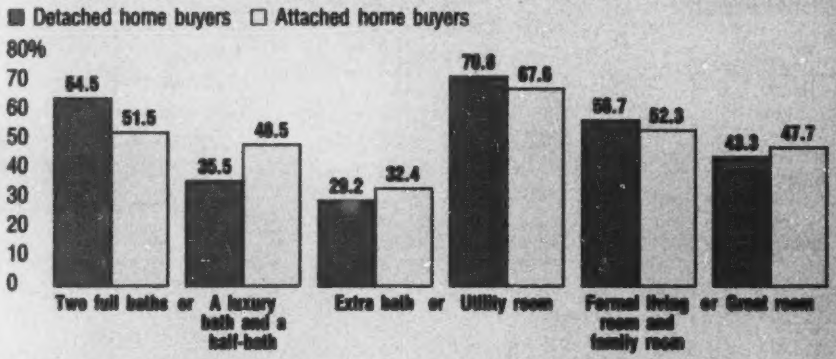
In 1975, all consumers said the overall workmanship of a house was the most important factor in deciding whether to buy. Today, homeowners are most concerned with value. Builders believe the main reason their product sells is location.

	Things consumers expect	Why builder belives project is successful
Good neighborhood	64.9%	64.7%
Value	62.4	41.4
Quality	54.2	59.9

DESIGN

Room Options

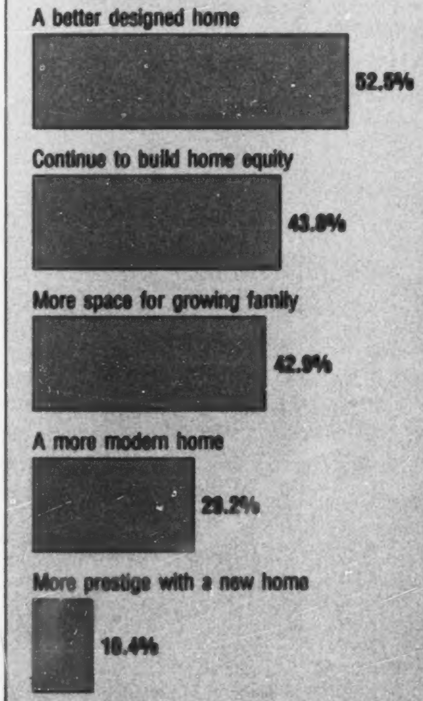
Buyers of attached and detached homes differ on room options. Buyers of detached homes would rather have an extra full bath, while buyers of attached homes want a 1/2-bath if they can get one luxury bath. But both buyer types would opt for a utility room over an extra bath.



Why Move-up Buyers Move Up

More than 75% of move-up buyers believe affordable move-up housing is available in their area. And what do they look for? Better design and more space.

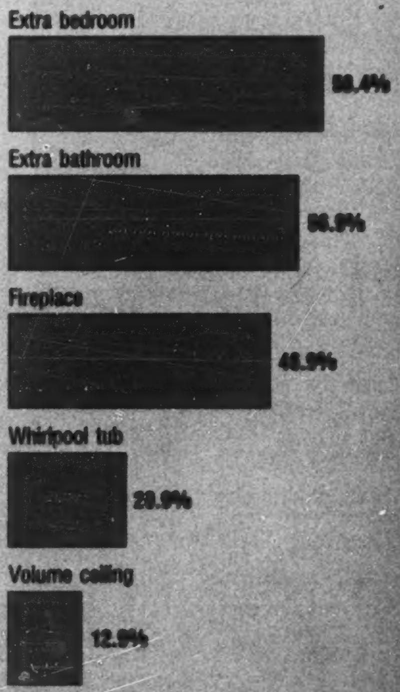
Needs of the move-up buyer



Buyers Want More Space

When it comes to the extras, buyers want more bathroom and bedroom space. Last year, a fireplace was more important than an extra bathroom.

Extra features consumers prefer



All buyers prefer a 15- to 30-minute drive to work. First-time buyers are willing to drive a little longer—30 to 45 minutes, said 34.1%.

Bigger Is Better

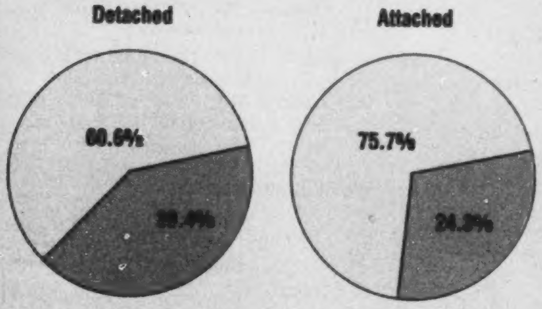
Lot Size Healthy For Detached Homes

Most builders still offer buyers 1/2-acre or larger lots for a detached house. Builders of attached homes offer the majority of their buyers private courts, but nearly as many attached homes share a common open space.

Size of lot with builders' best-selling model	Detached homes	Attached homes
1/2-acre or more	52.7%	6.5%
Narrow front, deep rear	32.4	14.3
Small yard with private court	12.6	42.9
Common open space, no private yard	2.7	41.6
Narrow front, deep front yard	3.8	2.6

Buyers Prefer Design, Not Land

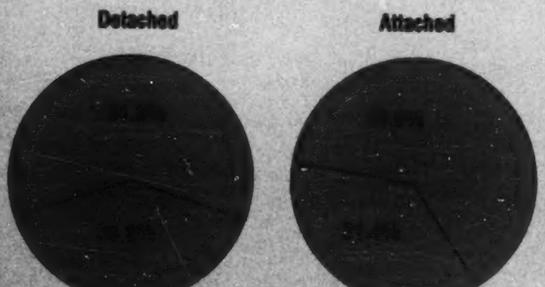
Even though most builders offer at least a 1/2-acre lot, most buyers (especially attached) would trade land for upgraded amenities in a better designed home.



☐ Upgrade design and amenities, but have a smaller lot
▨ Give up amenities for a bigger lot

Disagreement On House Size Vs. Amenities

When the choice is house size or more amenities in a smaller, high-quality space, detached buyers want more size. Amenities can be added later, they say. Attached buyers, though, want mora amenities.



▨ More amenities in a high-quality space
▨ Bigger house, add amenities later

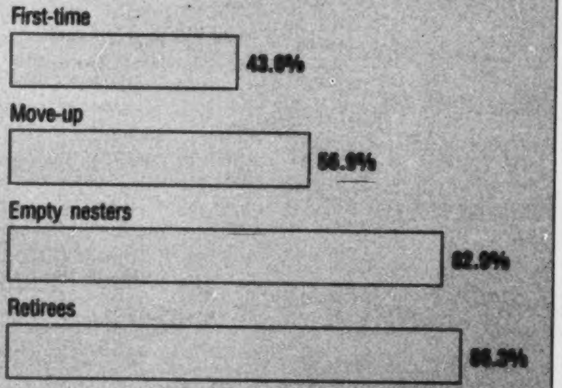
Design Elements

Consumers rated the following design elements they determined as most desirable in a new home. Like last year, space options rated highest.

Design elements	Most desirable
Linen closet	88.5%
Garage storage space	79.5
Pantry	76.3
Patio	74.4
Two closets in master suite	71.7
Porch	70.6
Family entertainment space	70.0
Covered entries	67.6
Multipurpose rooms	58.4
Bigger master bath	48.2
Home office space/hobby room	42.5
Cathedral or vaulted ceilings	41.2
Formal entertainment space	38.6
Raised, flat ceilings	37.6
Sun room	37.4
Built-in furniture for more space	36.2
Home entertainment room	29.9
Full-time home office	28.1
Dramatic windows	24.5
Interior lofts and balconies	21.7
Interior plant shelves	21.5
Garden bathroom	20.9
In-law suite	17.2
Home fitness center	16.8

Consumers Want First-Floor Master Suite

The majority of all consumers, except first-time buyers, want a first-floor master suite. Retirees and empty nesters in particular want the master suite on the first floor.



PRESENTATION

Buyers Like Models, Not Salespeople

GRAND OPENING

Lee Iacocca doesn't sell Chryslers from a showroom. He's too busy making executive decisions. Likewise, builders should not be sitting in a model home selling their product. That's why they have a sales staff.

But builders have to know what is going on in the sales office. PB's survey indicates that home shoppers think salespeople are too pushy, not knowledgeable enough about the homes they sell and don't make buyers feel welcome. This reflects poorly on builders and could cause lost home sales.

That is not good news considering the investment a builder makes in a model home. Builders said they spend an average of $21,928 per model for interior decorating and another $5572 for landscaping. That's $27,500. Plus, they spend an additional $38,603 for constructing and decorating a sales center. After that kind of investment, builders cannot afford a poor sales staff.

When it comes to the actual model home, buyers like what they see. They like the decorating, although 56.5 percent of buyers said unfurnished or only partially furnished models are fine. And buyers like the size, workmanship and condition of the model.

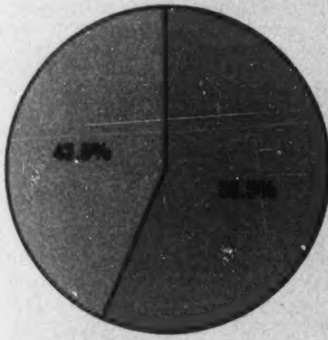
Empty nesters visit models more than any other buyers, but only 39 percent went to a detached model. Empty nesters are the most likely buyer group to visit an attached-home model (15.3 percent) or a condominium model (10.2 percent). Move-up buyers visited a detached house most often (57.1 percent).

Overall, builders said that a detached house with three bedrooms is their best-selling plan. Only builders in the East North Central region said a four-bedroom model is their best seller. For attached models, only builders in the Mid-Atlantic and South Atlantic regions said a townhouse is their best seller, while builders in New England and the Pacific regions say buyers like condominiums in low-rise buildings.

Does the type of brochure matter? Not much, consumers say. A folder with loose inserts is preferred by 51.2% of buyers compared to 48.8% for a bound brochure.

Influence Of Interior Decorating

Does a model home's interior decorating influence a buyers decision to buy? Most consumers say no, but decorating has a stronger influence on move-up buyers and retirees.



▩ No, unfurnished or partially furnished models are fine. **56.5%**

▨ Yes, furnishings help visualize living in a house. **43.5%**

Buyers Visit Detached Models

In the last 6 months half of the home buyers surveyed visited a detached house on 1 lot. Only a handful went to an attached model, and more than a third did not visit a model.

Type of model visited within past 6 months	
Detached house	49.9%
Did not visit a model	37.2
Attached house	5.5
Apartment-type condo	4.2
Mobile home	3.2

Buyers Want An Open Floor Plan

When home buyers walk through a model, they are impressed by certain aspects. For the most part, they aren't interested in individual rooms; they are interested in the overall house plan.

What affects your impression of the house	% all consumers
Open floor plan	40.9%
Kitchen	29.0
Master bedroom	6.9
Living room	5.9
Other	5.9
Family room	5.0
Entry	4.2
Master bath	1.2
Volume ceiling	1.0

What Works In A Model Home?

When it comes to checking out a model home, consumers are fickle. They like the decorating, but they don't like the salespeople. They like the size of the house, but think it costs too much. The following checklist indicates what more than 50% of buyers liked or disliked about the model presentation.

Turned on

- Model decorating
- Size of the home
- Workmanship of the home
- Condition of the model
- Condition of sales office

Turned off

- Cost of the home
- Selling tactics
- Attitude/approach of sales staff

Salespeople Take Note

More than half of home shoppers (56.2%) did not like the approach of the sales staff in the model home. What is it about sales people that irritates buyers? Here are a few clues.

Sales approach	Most	Some	Few
Did the salesperson present the basic advantages of the home's community?	43.8%	41.1%	15.1%
Did the salesperson point out hidden values?	38.8	42.4	18.8
Did salesperson point out benefits the competition doesn't offer, without demeaning them?	20.6	42.9	36.6
Did salesperson treat me with professionalism?	35.2	44.3	20.6
Are salespeople too pushy?	20.5	38.4	41.1
Are salespeople interested in me as a customer?	16.8	38.0	45.2
Are salespeople knowledgeable about homes they are selling?	11.5	47.1	41.3
Do salespeople make you feel welcome?	5.6	33.6	60.9

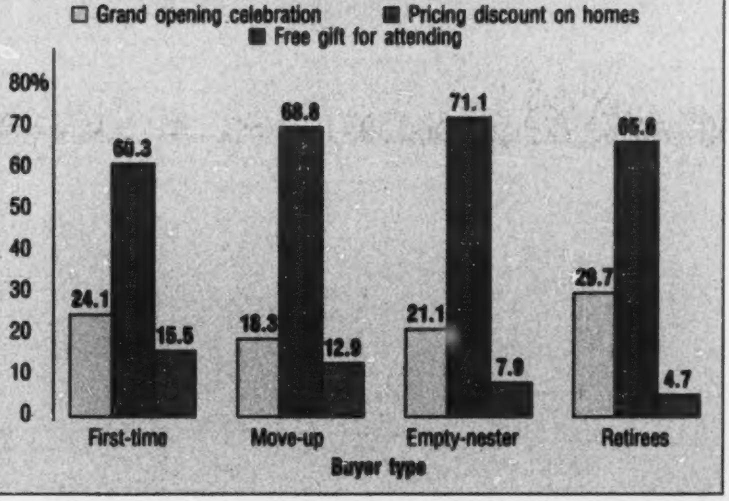
Brokers And Ads Bring Buyers

When home shoppers look for a home, their top information sources are brokers and newspaper advertising. The electronic media, radio and television, has little influence.

Sources for new homes	% all consumers
Real estate broker	68.8%
Newspaper or classified ads	55.7
Advice from friends	27.1
Billboards/for-sale signs	23.1
Parade of homes	13.3
Direct mail from builder	5.7
Cable TV	1.1
Radio ads	1.0
Television ads	0.8

Price, Not Promotion

Different promotional activities attract buyers better than others. First-time buyers and retirees like grand opening celebrations better than empty nesters and move-up buyers. But without a doubt, it's a price discount that brings all buyers in.



PRODUCTS

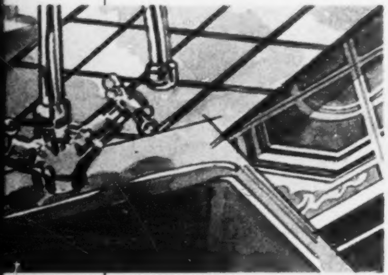
Give The Buyer The Right Stuff

Quality products are at the heart of a quality house. Buyers expect a certain degree of quality with their appliances, windows and floors. Builders should also be sensitive that buyers pay more for housing today than in the past, and products in the house should reflect that.

Builders and home buyers don't always see eye-to-eye on standard products. Two charts on the opposite page highlight products where builders and buyers have more than a 15 percentage point difference in opinion. These products are noted for two reasons. First, builders can spot products the buyer wants and are not offered. For instance, 85.6 percent of consumers want a medicine cabinet as standard, yet only 59.6 percent of builders offer it as standard. And second, just the opposite. Builders are offering some products as standard buyers don't care for. For example, 50.3 percent of builders offer colored fixtures at no extra charge, though only 31.8 percent of buyers want colored fixtures as standard.

Similar discrepancies can be found by scanning the options chart on page 116. Though these items are not highlighted, there are significant percentage point differences in many products.

Most home shoppers said they would pay extra for energy-saving products, though a small percentage of retirees (14.2 percent) would not pay extra because they say the savings take too long to recover. Buyers also said they would pay extra for low-maintenance products. Empty nesters (66.2 percent) and retirees (64.5 percent) wanted this option most. First timers (57.6 percent) would also pay extra, but 24.4 percent would not spend the extra money.



Want to appeal to young buyers? Add a home entertainment room and a home fitness center. Buyers under 30 years old are most likely to want those options.

Standard Allowances

Buyers of detached housing get more from the builder than buyers of attached housing. On the average, builders offer buyers of detached homes twice as much money for standard allowances than buyers of attached housing.

Standard allowance for:	Detached	Attached
Lighting	$1543	$534
Plumbing fixtures	2940	1437
Appliances	2161	1472
Landscaping	2316	1641

Build Better Baths

Consumers want a bigger and grander bathroom with more closet space. And if you think a fireplace sells, forget it. Only 10% wanted fire and water; 68% of builders reported the master bath in their best-selling model is getting bigger.

Most important bathroom elements	% all consumers
Walk-in closet	79.6%
Private bath	76.4
Separate from bedroom area	58.3
Dressing and make-up area	32.5
Mirrored doors	18.8
Sitting area	18.1
Balcony or patio	17.3
Fireplace	10.6
None	5.4

Who Will Pay Extra For Exterior Maintenance?

Buyers of attached and detached homes don't see eye-to-eye when it comes to yard care and exterior maintenance. The majority of buyers of attached homes will pay extra for these services, but the majority of detached buyers will not.

Detached/Attached

Are you willing to pay a monthly fee for yard maintenance?

Detached/Attached

Are you willing to pay a monthly fee for exterior home care?

How Smart Is Your House?

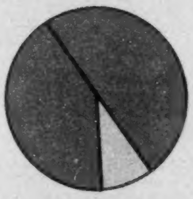
Depending on the buyer, intelligent house features like security, entertainment and energy management are important. The majority of all buyer types want security, especially empty nesters and retirees.

	% buyer type				
Intelligent House feature	**Move-up**	**Empty-nester**	**First-time**	**Retirees**	**Price buyers will pay**
Entertainment	**34.4%**	**32.2%**	**40.9%**	**39.3%**	**$725**
Security/safety	**64.4**	**76.5**	**65.8**	**72.3**	**900**
Energy management	**69.3**	**76.6**	**67.8**	**64.7**	**967**
Communications	**37.6**	**39.0**	**29.5**	**35.9**	**497**
Service/data	**12.9**	**15.0**	**13.7**	**17.6**	**454**

Pay Now, Save Later

Consumers overwhelmingly said they would spend more money on energy-efficient products and low-cost maintenance equipment to save dollars down the road.

Would you spend an extra $500 for energy-saving products to save $100 a year on heating and cooling costs?

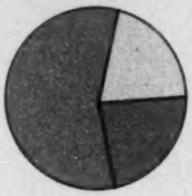


▨ Yes **66.5%**

■ Yes, and would spend more to save more **23.4%**

☐ No, savings recovery takes too long **10.1%**

Would you spend an extra $1000 on low-maintenance equipment to save $200 a year on maintenance?



▨ Yes **62.0%**

■ Yes, and spend more to save more **21.1%**

☐ No, savings recovery takes too long **16.9%**

What Should Be Standard?

Consumers expect certain items, like a medicine cabinet, as standard in their new bathroom. Builders offer certain standard items. And for the most part there is agreement between consumers and builders on what should be standard, but the highlighted items in the following charts indicate at least a 15 percentage point difference in opinion.

Kitchen features

Kitchen features	Consumers want	Builders offer
Range/oven	**88.8%**	**90.4%**
Dishwasher	**80.1**	**95.0**
Vinyl floor covering	**68.9**	**70.2**
Pantry	**67.3**	**57.8**
Self-cleaning oven	**64.9**	**65.2**
Garbage disposal	**64.5**	**78.0**
●**Refrigerator**	**61.1**	**45.7**
Stainless steel sink	**59.0**	**63.0**
●**Single-handle faucet**	**58.8**	**79.5**
Fluorescent ceiling lighting	**51.3**	**47.8**
Two sinks	**50.2**	**40.4**
●**Laminated plastic countertops**	**46.7**	**73.3**
Microwave oven	**38.9**	**53.4**
Enamel/porcelain sink	**33.0**	**32.0**
Ceramic tile countertop	**29.1**	**17.7**
●**Two-handle faucet**	**28.4**	**11.2**
Ceramic tile floors	**19.4**	**18.6**
Trash compactor	**15.2**	**18.6**
Ceramic tile walls	**10.0**	**6.8**
Carpeted floor	**9.3**	**6.5**

Bathroom features

Bathroom features	Consumers want	Builders offer
●**Medicine cabinet**	**85.6%**	**59.6%**
Exhaust fan	**85.1**	**94.7**
●**Linen closet**	**81.8**	**56.2**
Tub/shower door	**61.9**	**59.9**
●**Ceramic tile walls**	**49.8**	**27.6**
Ceramic tile floors	**47.6**	**47.5**
One-bowl vanity	**47.0**	**41.9**
●**Safety features**	**43.2**	**24.8**
Two-bowl vanity	**39.0**	**51.6**
Bathroom heater	**38.7**	**27.0**
White fixtures	**31.8**	**39.8**
●**Colored fixtures**	**31.8**	**50.3**
Dressing area	**23.3**	**28.0**
●**Mirrored wall**	**20.7**	**72.7**
Skylight	**19.1**	**32.0**
Ceramic tile vanities	**18.5**	**10.9**
Compartmentilized bath	**15.6**	**20.2**
●**Whirlpool**	**11.8**	**33.5**
Sauna	**2.7**	**1.2**
Bidet	**2.0**	**5.3**

PRODUCTS

Home security is most important to buyers more than 60 years old (69.3%), although all age groups rated it important. Buyers aged 30 to 39 are most likely not to want it.

Options, Options, Options

Consumers want options and will pay extra for them. Builders offer many of these options as standard. If you look closely, you'll find a few items that buyers may not care too much for.

$100 to $300 options		
Smoke/fire alarm system	62.9%	87.7%
Energy-saving water heater	61.4	80.9
Ceiling fan	55.2	52.9
Built-in TV/wall jack	52.9	78.7
Self-cleaning oven	52.7	78.6
Outdoor lighting	44.9	50.7
Tub/shower enclosure	42.8	67.6
Water-saving shower heads	32.7	67.9
Dimmer switches	31.3	39.1
Clock-controlled thermostat	29.2	22.9
Closet organizers	28.3	33.2
Water-saving faucets	28.3	63.8
Decorative exterior door	25.8	76.0
Gas outlet at fireplace	21.0	36.6
Sump pump	20.6	40.3
Patio grill	18.5	2.3
Exterior shutters	17.0	57.3
Mirrored doors	15.4	23.9
Trash compactor	15.1	19.2
Interior shutters	6.4	2.4
$300 to $500 options		
Garage door opener	56.4%	57.8%
Storm door	40.7	26.8
Lawn sprinkling system	39.3	31.6
Ceramic tile walls	39.0	44.5
Microwave oven	36.4	52.4
Built-in cabinets (not kitchen)	32.9	28.2
Power-attic ventilator	31.6	15.8
Entry-way with ceramic tile	30.9	56.0
Patio privacy fence	22.8	21.4
Automatic humidifier	22.1	17.9
Greenhouse/planter window	22.1	12.6
Wood sliding/patio door	20.9	90.6
Electronic air filter	15.2	11.6
$500 to $800 options		
Paved driveway	66.2%	83.9%
Refrigerator	55.7	46.2
Patio decking	36.6	61.4
Skylights	32.7	51.4

$500 to $800 options (cont.)		
Extra-large tub	24.5%	45.5%
Concrete patio	23.1	63.7
$800 to $1000 options		
Upgraded carpeting	60.7%	29.8%
Double-glazed windows	51.0	89.7
Shelf system for closet	38.1	56.1
Patio roof	24.6	19.7
Water softener	23.2	5.2
Intercom system	14.9	15.2
$1000 to $1200 options		
Zoned heating/cooling system	61.3%	59.1%
Laundry appliances	58.5	16.7
Central vacuum	25.4	15.2
Wet bar	15.9	27.7
European-style cabinets	11.7	32.8
$1200 to $1500 options		
Yard fencing	48.1%	23.5%
Hardwood floors	47.1	31.0
Tub and separate shower	42.6	66.5
Solar water heating	23.4	2.9
Kitchen barbeque grilltop	13.9	19.0
$1600 to $2000 options		
Air-conditioning	76.4%	78.5%
Storm windows	58.5	31.7
Frontyard landscaping	30.7	74.3
Insulated basement walls	29.1	46.7
Burglar/security system	29.1	19.1
Bay window	27.3	45.3
French doors	23.9	47.5
Whirlpool bath	19.6	34.3
Sauna	4.9	0.6
Bidet	2.1	5.4
$3000 to $6000 options		
Fireplace	75.1%	70.4%
Hot tub	28.9	3.8
Additional powder room	20.9	35.0
$6000 to $12,000 options		
Complete landscaping	69.9%	72.0%
Screened porch or Florida room	56.9	12.9
$12,000 to $20,000 options		
Rec room in basement	57.3%	18.0%
Swimming pool	52.7	[illegible].5

NOTE

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32, 50, 54, 60

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JANUARY 1990

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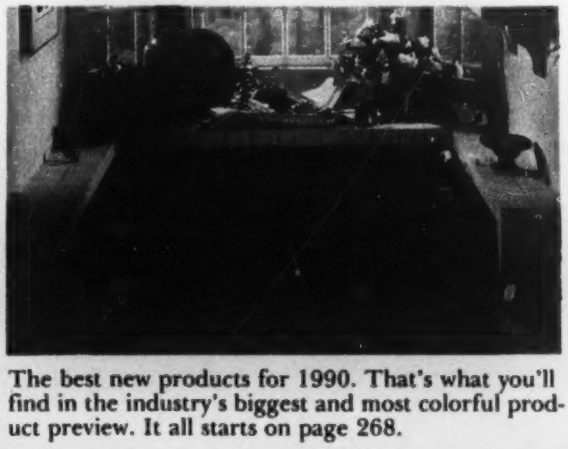
Professional Builder

VOL. 55

THE MAGAZINE OF HOUSING AND LIGHT CONSTRUCTION/A CAHNERS PUBLICATION

The best houses of 1988 and 1989. That's what the Best In American Living Awards program honors. A look at all the winners, beginning on page 196.



The best new products for 1990. That's what you'll find in the industry's biggest and most colorful product preview. It all starts on page 268.

FEATURES

The Best In American Living Awards 196

The "Best." That's a pretty heady label to bestow upon anything. But late last summer, a dozen judges decided that nearly three dozen housing projects deserved to win Best In American Living Awards.

Professional Builder's awards program (co-sponsored with the National Association of Home Builders) recognizes well-designed houses and condos that incorporate livability, construction quality and architectural features.

For details on how to enter next year's contest, see page 249.

New Products For A New Decade 268

In this special 20-page report, builders will find more than 100 new and best-selling products. Staff editor Andrea LaFreniere assembled this extensive portfolio of building products and services.

And don't miss the top 100 products of 1989. These are the products that piqued builders' interest last year. They are worth a second look today.

1990 Housing And Economic Forecast 28

Lower interest rates will mean steady improvement in new construction and in remodeling spending. That's the forecast of Cahners Economics, the forecasting arm of Cahners Publishing, parent of *Professional Builder* magazine.

Then turn to page 40 to read an exclusive PB survey of Giant builders that tells their building plans. They intend to build affordable housing in 1990. Some Giants also advise to stay lean this year, watch cash flow and investigate joint venture possibilities. Other economists' forecasts (page 50) indicate that 1990 will be nothing to jump up and down about. In fact, the NAR calls its economic outlook "boring."

After reading all three outlooks, builders can make up their own minds about how to proceed in 1990.

On the Cover

Marc Sharp Construction built this 3836-square-foot custom house in Longwood, Fla. You can purchase working drawings of this plan. See pages 240 and 241 for details. Architect was the Evans Group. Photo by Everett & Soule.

Professional Builder

THE MAGAZINE OF HOUSING AND LIGHT CONSTRUCTION/A CAHNERS PUBLICATION

Party for profits. Page 89.

How healthy is your business? Balance sheet ratios can reveal your company's strengths and weaknesses. Page 54. **Preservationists can stop growth.** But builders in the East tell of solutions that satisfy both sides. Page 101. **Off-site model** sells out-of-state housing. Page 106. **Custom builder** raises money for charity. Page 106. **NAHB Show Preview includes** a look at seminars, plus an exclusive housing tour of Atlanta. Page 116. **Redwood requires special care.** Some tips on handling the product. Page 165.

New products for a new decade. Page 268.

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Matter Of Opinion 401
You are a most important person to PB in the '90s.

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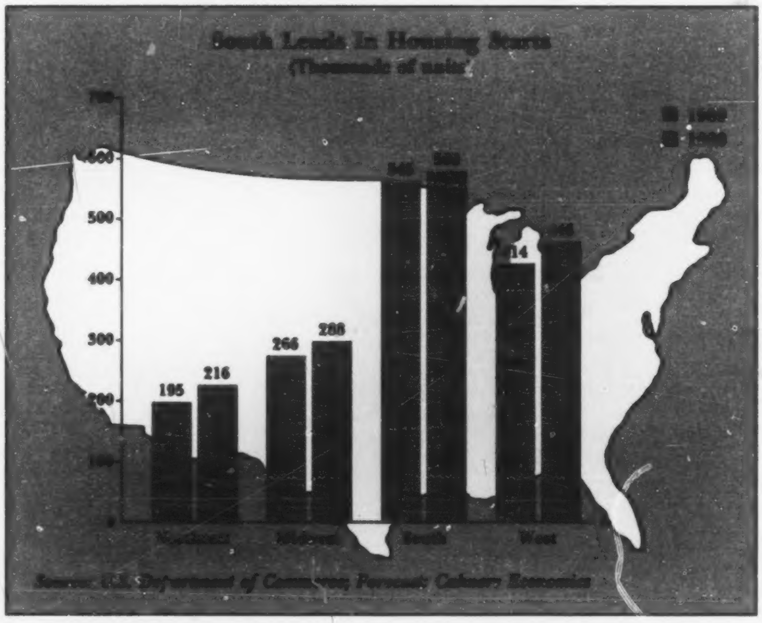
Why 1990 Will Be Good To Builders

Lower interest rates will ensure steady improvement in new construction and remodeling spending as the year progresses.

By Cahners Economics

As the new decade begins, the housing industry is on the road to recovery. Though housing starts and new home sales were discouragingly slow to reflect the steadily improving interest rate environment during the last half of 1989, declining levels of unsold inventory and slowly increasing sales prices have provided the extra shots in the arm necessary to begin to move the market along.



Source: U.S. Department of Commerce; Forecast: Cahners Economics

Our expectation is that the economy will grow by about 2.1 percent in inflation-adjusted terms during 1990, following two years when GNP growth averaged about 4.0 percent. The greatest sources of optimism for the economy this year and next are the downward trends in both inflation and interest rates. The Federal Reserve Board has spent the past two years attempting to rein in inflation without slowing the economy to the point of recession. This policy has had a painful impact upon home builders, as interest rates have risen sharply and many potential entry level and trade-up buyers have been priced out of the market.

The Fed's efforts, however, appear to have been successful — we expect inflation to average just under 4 percent this year. Like inflation, interest rates will continue to decline, at least through the first half of this year.

Following two years of only small gains in construction spending, 1990 will see a return to more normal patterns of growth. Spending for all types of construction — including new homes, non-res structures and infrastructure improvements — grew at an anemic 0.7 percent rate during 1989. Led by an early recovery in residential construction, and a somewhat later turnaround in non-res and heavy construction, we expect that total spending on new construction will increase 7 percent in 1990.

Construction dollars for the maintenance, expansion, remodeling and repair of existing space will continue to increase at a healthy rate during 1990.

Residential construction

After falling for three consecutive years — including a 4.6 percent decline this past year — we expect new residential construction activity to finally turn up in 1990. Housing starts should total about 1.51 million units this coming year, enough to more than recoup the losses of the previous two years.

The construction of single-family houses will account for almost all of the coming year's gain. The 1.13 million single-family starts we forecast for 1990 represents an improvement of 8.1 percent from 1989.

While we believe that the worst is over, total multiunit starts in 1990 will gain only marginally from 1989's nine-year low. While we are expecting the number of multifamily units built to plateau at about 380,000 units during 1990, the dollar value of construction should increase by an encouragingly healthy 6.1 percent in the year ahead.

Lower mortgage interest rates will work to the benefit of residential construction during 1990. Fixed-rate mortgages should average 9.2 percent by early summer,

By Kermit Baker, Daryl Delano and Stephen Evans, Cahners Economics, Newton, Mass.

and should rise only slightly to about 9.5 percent by year's end. Home sales will be further encouraged by smaller increases in home prices than during the mid- and late-1980s. After rising an average of almost 10 percent annually from 1986 to 1988, new-home prices rose by a less-daunting 6 percent during 1989.

Residential remodeling

A steadily increasing share of construction dollars is going toward maintaining, repairing and remodeling existing residential structures.

Higher interest rates and a general slowdown in the economy caused the rate of spending growth on these projects to slow during 1989. With the lower financing costs expected in 1990, however, we expect to see a return to the high rates of spending growth which have been in evidence for most of the last decade.

Improved sales of existing homes, and continued growth in household income, will help to raise 1990 repair and remodeling spending to a level of $114.5 billion — 9.6 percent above the 1989 total. The value of permits authorizing remodeling work has been rising most sharply in the West and Midwest regions.

Non-res reconstruction

Despite the lackluster spending trends in new non-res construction, expenditures on non-res reconstruction activities have continued to grow at a healthy pace. Permit values for reconstruction work on non-res buildings grew by just under 10 percent during 1989. Although we expect that the increase during 1990 will be less than half as large, spending on reconstruction work will continue to grow faster than will spending for new non-res construction.

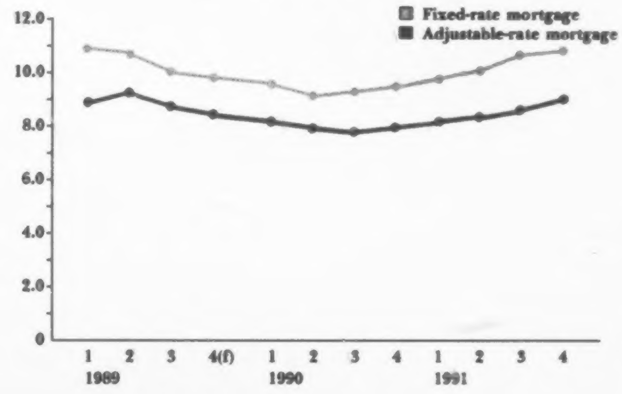
Finally, an important note for light construction contractors involved in — or considering becoming involved in — non-res work. A special federal government study released last year revealed that, dollar for dollar, the value of reconstruction work taking place in non-res commercial and institutional markets is more important than the value of new construction being undertaken.

Building materials

Price inflation for building materials was relatively modest for most of the early- and mid-1980s. In 1988, however, the producer price index for building materials shot up 5.6 percent — the highest annual increase in seven years. As the economy has slowed, however, and construction markets have become particularly weak, demand-induced upward pressure on materials prices has eased — a mixed blessing at best.

Continued on page 32

Mortgage Interest Rates Dip, Then Climb
(Quarterly averages—percent)



Source: Federal Home Loan Mortgage Corp.; Forecast: Cahners Economics

1990 Building Forecast, At A Glance

- **Housing Starts: 1.13 million single-family units; 1.51 million total units**
- **Remodeling: 9.6 percent increase in spending to $114.5 billion**
- **Non-Res: The action is in non-residential reconstruction**
- **Mortgage Interest Rates: Look for 9.2 percent by mid-summer**
- **Inflation: Just less than 4 percent this year**

Source: Cahners Economics

Remodeling expenditures expected to be $114 billion in 1990

Continued from page 29

As a result, we are forecasting an inflation rate for all construction materials that averages 2.6 percent this year.

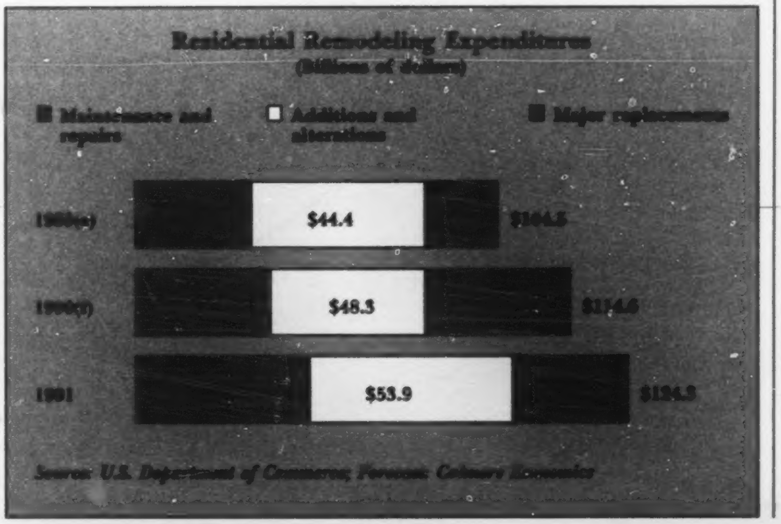
Regional trends

The New England states have borne the brunt of the region's slowdown; the value of building permits authorizing new residential construction plummeted almost 30 percent during 1989. While the Middle Atlantic states have also seen a decline in new home permits, values have fallen only about one-third as sharply as in New England.

The Midwest and South both recorded little change in the value of residential permits issued last year. Within these two large regions, states in the East North Central area (including Michigan, Ohio, Illinois, Indiana and Wisconsin) and the West South Central area (including Texas, Oklahoma, Louisiana and Arkansas) fared the best with the value of new home authorizations rising by an average of 5 percent during 1989.

Although the gains in the West South Central states came atop a severely shrunken base, it is the first sign that new home construction in this oil-industry-dependent area is at last starting to move in the right direction.

The West was the only region to record an increase in residential building permit values last year. However, there were sharply different trends apparent among states within the region. Residential permit values in the energy-dependent Mountain states were little changed from a year earlier. However, in the Pacific states (most dramatically, in California) permit values rose by 11 percent. An even larger gain of 14 percent was recorded in the value of permits authorizing residential remodeling in the Pacific states.



Source: U.S. Department of Commerce; Forecast: Cahners Economics

Summary outlook

In summary, we see 1990 as a year when home builders and remodeling contractors will begin to see a real rebound in activity from the steadily declining levels of the past three years.

Still, it's important for builders to acknowledge — and to plan for — the new reality of the 1990s housing market.

Inexorable demographic forces will place constraints on the volume of new construction that will take place this decade. Continuing declines in the number of young households being formed will result in lower levels of construction than we have become accustomed to.

Nevertheless, builders who adapt to the changing needs and expectations of home buyers — and who diversify into the increasingly important residential and non-res remodeling markets — will continue to do well during the 1990s. ☐

Top Markets In 1990 For New Residential Construction And Residential Remodeling
(Projections of dollar value of building permits)

New residential construction	**Residential Remodeling**
1. Los Angeles-Long Beach	**1. Los Angeles-Long Beach**
2. Riverside-San Bernadino	**2. San Francisco**
3. San Diego	**3. Washington, D.C., Md., Va.**
4. Seattle	**4. Philadelphia**
5. Sacramento, Calif.	**5. Chicago**
6. Chicago	**6. Baltimore**
7. Washington, D.C., Md., Va.	**7. New York**
8. Atlanta	**8. Boston**
9. Oakland, Calif.	**9. Anaheim-Santa Ana, Calif.**
10. Orlando, Fla.	**10. Newark, N.J.**

Forecast: Cahners Economics

Nothing To Jump Up And Down About

Economists for the major real estate trade associations call their economic outlook for the year "boring." Listen to John Tuccillo of the National Association of Realtors: "Next year's economy, in short, is a crashing bore."

Said David F. Seiders of the National Association of Home Builders: "The national forecast looks downright boring on paper, with gentle contours that look nothing like the roller coaster rides of the past."

Cahners Economics has a detailed forecast for housing, remodeling and non-residential building beginning on page 28.

But these two don't agree on everything. Seiders is betting that a soft landing for the economy will occur soon. But Tuccillo said in November that the oft-predicted soft landing has, in fact, happened.

So what's a builder to make of these economic forecasts?

Seiders sees 1990 shaping up this way:

☐ Economic growth of less than 2.5 percent for several quarters, but no recession

☐ Stabilization of the unemployment rate in the 5 to 5.5 percent range, with only a slight increase in early 1990

☐ Stabilization of "core" rates of inflation around 4.5 percent in the very near term, with only a slight improvement by mid-1990

Lyle E. Gramley, chief economist for the Mortgage Bankers Association expects fixed-rate mortgages to be in the 9.25 to 9.50 percent range until mid-1990 and then to average 9.50 percent for all of 1990. NAR's Tuccillo agrees.

NAHB forecasts about 1.45 million housing starts in 1990, up almost 4 percent from 1989. The single-family component is expected to move up nearly 5 percent, while the multifamily component should edge down to about 375,000 units.

Tuccillo said that with the slowing of the economy, he expects that the Consumer Price Index to advance only 4.1 percent in 1990, down from 1989's inflation rate of 4.8 percent.

Seiders said forecast risks associated with a soft landing scenario are high because of the fragile condition forecasted for the economy. "The uncertainties are high particularly because we don't really know what the impacts of the thrift reform legislation will be on the housing finance system."

The weakest areas of the country are New England and the Middle Atlantic states, he said. The Oil Patch market, including the West South Central states, will move at about the same pace as the national market. And the Rust Belt, he said, will continue to gain share, but only gradually. The Pacific area should pick up a bit more share, rising to 22 percent of national housing activity. ☐

Why So Boring?

Economist John Tuccillo of the National Association of Realtors said that the economy looks so bland because of the fundamentals driving it.

"The baby boom generation is reaching its maturity and filling the economy with experienced productive workers who are able to sustain an expansion of production and consumption with little strain. Any potential strain has been siphoned off by foreign markets," Tuccillo said.

"We ought not take the stock market seriously; it has taken on the clubby atmosphere of a fraternal lodge or labor union and probably has as much impact on the economy.

"And the federal deficit could come home to roost. But for the most part, 1990 looks a lot like 1989—a year of steady growth against the backdrop of moderate inflation and interest rates." ☐

Corrections

Corrections To The December 1989 Consumer Survey:

The "Consumers Want" and "Builders Offer" column headings were omitted from the tables on pages 116 and 117 of the December 1989 *Professional Builder*. The first column shows the percentage of consumers who would pay extra for the product. The second column shows the percentage of builders who now offer that product as a standard feature.

The following chart was color-coded incorrectly. This is the corrected version.

Price, Not Promotion

Buyer type	Grand opening	Discount	Free gift
First-time	24.1	60.3	15.5
Move-up	18.3	68.8	12.9
Empty-nester	21.1	71.1	7.9
Retirees	29.7	65.6	4.7

Management Short Course: Understanding The Balance Sheet

Look beyond the profits. Balance sheet ratios can give a more complete picture of the health of your company.

By Frank Newton and Charles G. Graham

For an industry as capital incentive as home building, we are unusually ignorant of the balance sheet and its contribution to our understanding of financial performance.

The focus of many builders is on the income statement rather than an integrated understanding of both the income statement and the balance sheet. The better a builder understands the relationships between the two statements, the better the financial decision making.

A balance sheet is simply a statement that contains a list of everything that your company owns (its assets), everything your company owes (liabilities) and the difference, or what your company is worth (the equity or net worth).

For a better understanding of why you need to know what's on the balance sheet, it helps to compare the balance sheet and income statement to a savings account and its interest income.

Let's say that an individual opens a savings account which earns 5.5 percent annual interest. As time goes by, the account continues to increase through additional deposits and the retention of the interest in the account. This account continues to pay the 5.5 percent interest but economic conditions change and other types of accounts are created which pay up to 10 percent interest. An astute business person would immediately redirect the investments from the savings account into the higher paying account.

Now, let's liken the balance sheet of a company to the above savings account. The builder's balance sheet contains all of the assets which have been invested. The builder should expect to get the maximum return on these assets which primarily are land and structure inventory.

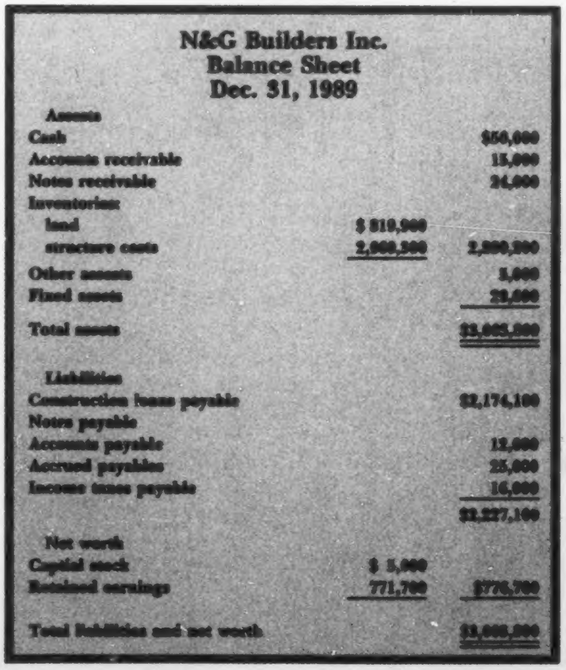
An astute builder will carefully control the quantity and quality of land inventory so as to maximize the return and minimize the investment.

Following are six ratios to compute for your own company and suggested targets to shoot for.

Debt to equity is a measure of financial risk. The higher the debt/equity ratio the more risk the builder has taken in the form of financial obligations.

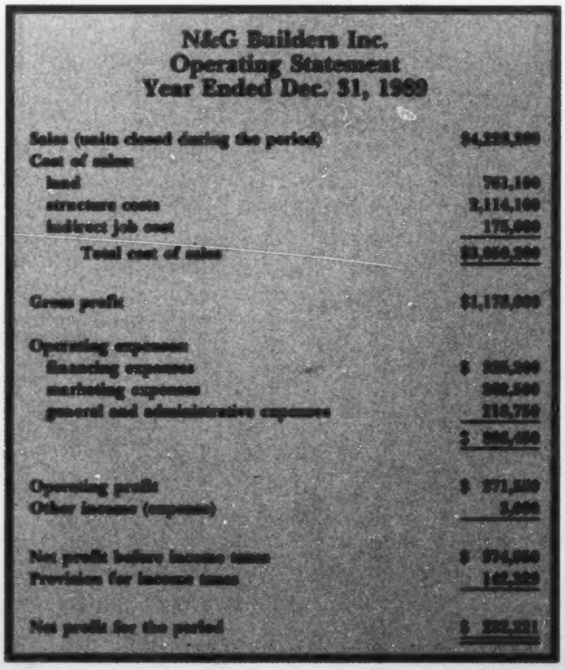
To compute this ratio, divide the total debt of a company

Continued on page 60



N&G Builders Inc.
Balance Sheet
Dec. 31, 1989

Assets		
Cash		$50,000
Accounts receivable		15,000
Notes receivable		24,000
Inventories:		
land	$ 819,900	
structure costs	2,068,900	2,888,800
Other assets		3,000
Fixed assets		23,000
Total assets		$3,003,800
Liabilities		
Construction loans payable		$2,174,100
Notes payable		
Accounts payable		12,000
Accrued payables		25,000
Income taxes payable		16,000
		$2,227,100
Net worth		
Capital stock	$ 5,000	
Retained earnings	771,700	$776,700
Total liabilities and net worth		$3,003,800



N&G Builders Inc.
Operating Statement
Year Ended Dec. 31, 1989

Sales (units closed during the period)	$4,228,200
Cost of sales:	
land	761,100
structure costs	2,114,100
indirect job cost	175,000
Total cost of sales	$3,050,200
Gross profit	$1,178,000
Operating expenses	
financing expenses	$ 325,200
marketing expenses	262,500
general and administrative expenses	218,750
	$ 806,450
Operating profit	$ 371,550
Other income (expense)	3,000
Net profit before income taxes	$ 374,550
Provision for income taxes	142,329
Net profit for the period	$ 232,221

For information circle 22

Sales to assets measures a builder's ability to select the right things to do

Continued from page 54

by the net worth. It is suggested that the builder attempt to manage the debt/equity ratio between 3- and 4-to-1. A 3-to-1 ratio should be maintained in times of prosperity while a 4-to-1 ratio would probably evolve during more difficult economic times.

Sales (or revenues) to assets measures a builder's ability to select the right things to do. Over time, the builder should push to reduce the dollars of assets necessary to obtain every dollar of sales.

Inventory turn measures the efficiency at which a builder is operating. The higher the turn, the greater the efficiency. Standards for inventory turn of land as well as structure should be established and measured.

It is suggested that no greater than a three-year supply of land should be inventoried by larger builders while smaller builders should arrange to acquire their lots as they are needed.

Depending upon the type of units being produced and whether you are a tract or custom builder, structure inventory turn will range between 2 and 4. A turn of 2 means that on average it took six months to build and close out each unit.

At the other extreme a turn of 4 means that a builder can build and close out a unit in three months. The higher the turn, the less the construction loan interest.

Inventory to sales determines the efficiency with which a company controls its inventories. In order to reduce risk, it is recommended that this ratio fall within a range of 35 percent to 45 percent. If a builder's ratio strays too far from the top of this range, this should warn him to take action to either increase sales or decrease inventories or a combination of the two.

Return on assets tells a builder how efficiently he has invested his assets. Different types of company assets would be expected to generate different rates of return.

Return on equity computes the total return that the builder received on the equity investment in the company. The equity investment is comprised primarily of the capital stock and retained earnings of the company, if it is incorporated. This ratio is computed by dividing the net profits of the company by its total "net worth" or "equity." The more highly leveraged a company with good profitability, the higher return the builder obtains on the investment.

Conversely, the higher leveraged company during adverse economic times can face financial difficulties. A minimum of 20 percent return should be expected. □

Frank Newton and Charles G. Graham are partners in Newton Graham Consultants, Charlotte, N.C. Newton was chief financial officer of the John Crosland Co. and Graham was chief marketing officer.

Computation Of Ratios

Debt to equity ratio $= \dfrac{\text{Total debt}}{\text{Net worth}} = \dfrac{\$2{,}227{,}100}{776{,}700} =$ 2.9-to-1

Sales to assets ratio $= \dfrac{\text{Sales}}{\text{Assets}} = \dfrac{\$4{,}228{,}200}{3{,}003{,}800} =$ 1.4-to-1

Inventory turn $= \dfrac{\text{Cost of sales structure costs}}{\text{Inventory structure costs}} = \dfrac{\$2{,}114{,}100}{2{,}060{,}300} =$ 1.03-to-1

Inventory to sales $= \dfrac{\text{Inventory}}{\text{Sales}} = \dfrac{\$2{,}880{,}200}{4{,}228{,}200} =$ 68%

Return on assets $= \dfrac{\text{Net profit}}{\text{Assets}} = \dfrac{\$232{,}200}{3{,}003{,}800} =$ 7.7%(1)

Return of equity $= \dfrac{\text{Net profit}}{\text{Net worth}} = \dfrac{\$232{,}200}{544{,}500} =$ 42.6%

(1) It is assumed that assets averaged $3,003,800 during the year.

How Large, Public Builders Stack Up To Industry Norms

	Profit margin	Return on common equity	Return on total assets	Revenue to asset	Debt to equity
Residential Construction†					
Industry composite	2.7%	11.0%	2.9%	107.0%	80.0%
Centex	2.6	10.4	4.5	171.0	36.0
Hovnanian Enterprises	6.8	21.9	6.1	91.0	162.0
Kaufman & Broad Home	7.2	20.7	11.4	157.0	70.0
Lennar	5.4	11.9	4.1	75.0	57.0
NVR	2.5	30.7	1.7	66.0	200.0
Ryland Group	3.0	24.2	8.6	288.0	66.0
Standard Pacific	21.5	35.9	15.3	62.0	0.0
Toll Brothers	8.6	33.1	6.0	70.0	96.0
UDC Universal Development	12.6	36.0	18.2	144.0	124.0
U.S. Home	0.1	2.8	0.1	76.0	112.0
Real Estate†					
Industry composite	−8.5%	−21.6%	−2.7%	31.0%	177.0%
General Development	0.7	3.9	0.4	60.0	235.0
PHM (Pulte)	4.8	13.0	1.2	25.0	81.0
General Contractors†					
Industry composite	2.4%	8.7%	3.8%	159.0%	38.0%
J.M. Peters	10.0	33.7	7.5	75.0	0.0

†As classified by Media General.
Source: Media General ratios as of late October 1989, compiled by Professional Builder.

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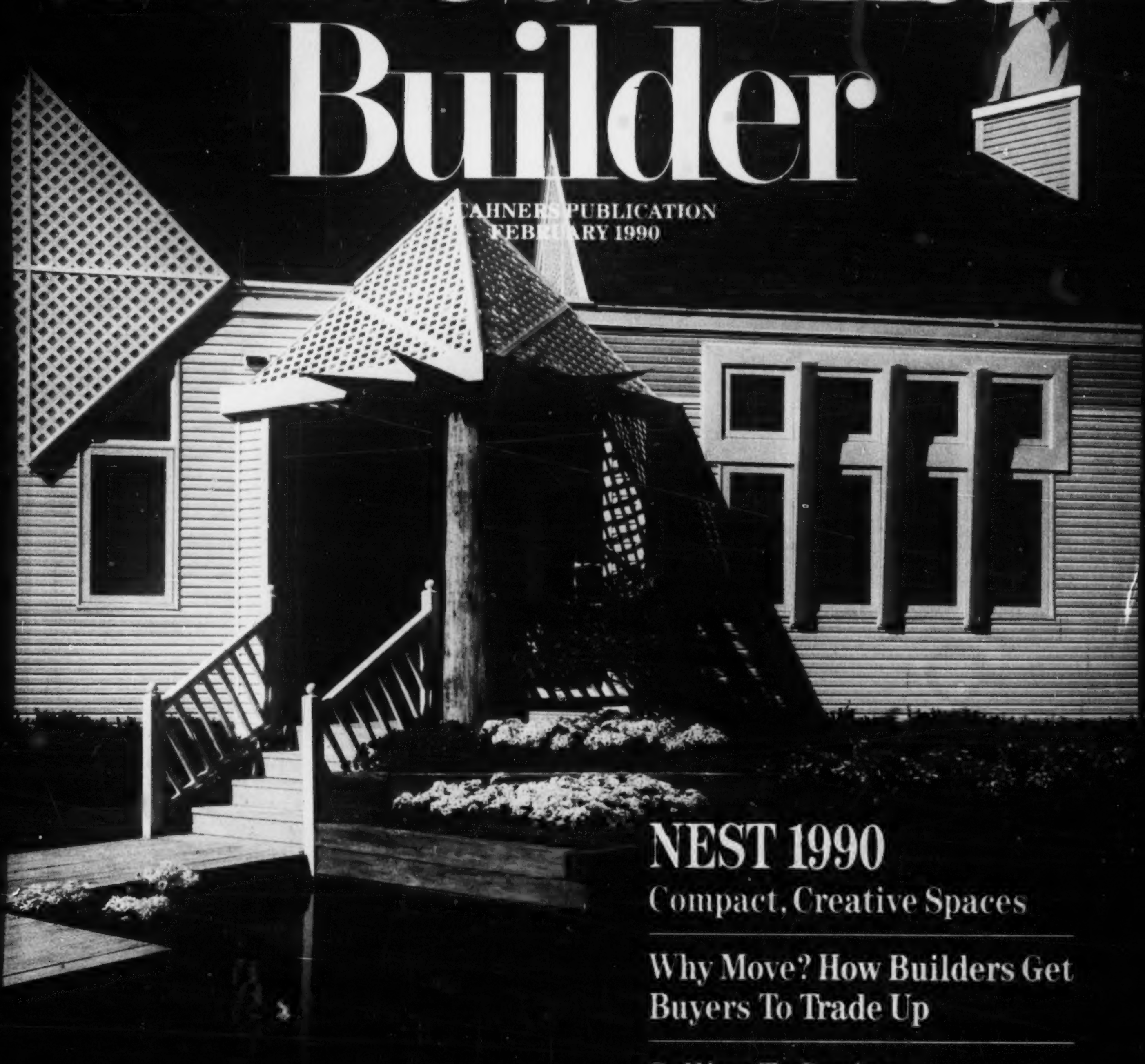

NEST 1990
Compact, Creative Spaces

Why Move? How Builders Get Buyers To Trade Up

Selling To Seniors: How To Market, Merchandise

All About Home Automation

NAHB Convention Report

Professional Builder

FEBRUARY • 1990

VOL. 55

THE MAGAZINE OF HOUSING AND LIGHT CONSTRUCTION/A CAHNERS PUBLICATION

Calton Homes' Country Club Oaks in Orlando, Fla., lures move-up buyers with spaciousness and elegance. Others, beginning on page 152.

Researchers say that at the right price consumers will buy home automation systems. Turn to page 60 for a detailed look at this new technology.

Crest Builders' Danbridge At University Place project is featured as one of this month's *Professional Builder* QVA Homes. Page 160.

FEATURES

All The Right Moves For Today's Move-Up Buyers 152

What kind of houses sell best to move-up families? *Professional Builder* editors William Lurz and Susan Bady talked to some of the top practitioners of the trade to get their do's and don'ts. They say to start with a grand entry, mix in upgraded materials and finishes and add the fine points: master-suite privacy, gourmet kitchens and get-away spaces for both adults and children. Calton Home's Country Club Oaks in suburban Orlando, Fla., offers an upscale solution to customers searching for extra living space. Fieldstone Co.'s Alga Hills in La Costa, Calif., is meeting pent-up demand for primary, move-up housing in an area traditionally seen as a resort market. Lakepoint, Ritchie Associates' 220-acre master planned community in Wichita, Kan., is drawing both families and empty nesters with a convenient location, beautiful terrain and well-designed land plan.

Builders Switch On To Home Automation Systems 60

Voice-activated music systems; VCRs that can be programmed from across the country; bedside controls that monitor everything from the furnace to your coffee-maker. The technology may sound futuristic, but home automation systems already are reshaping American lifestyles.

Quality, Value And Affordability 160

The QVA awards program is designed to lead the industry toward the construction of stylish, high-quality and affordable housing. This month, four award-winning projects are profiled. Wiseman-Hughes Enterprises, Crest Builders, American Properties and Wood Brothers Homes are our award-winning builders.

On the Cover

Nest '90 embodies themes and addresses issues that will impact buyers well into the 1990s and beyond: affordability; handicapped adaptability; creative use of small square footages; and cost-efficient landscape design. Hedrich-Blessing photographed the house for the Housing Information Center, a consortium of building industry businesses that includes *Professional Builder*. More on NEST, beginning on page 87.

Professional Builder

THE MAGAZINE OF HOUSING AND LIGHT CONSTRUCTION/A CAHNERS PUBLICATION

News from last month's NAHB convention. Page 26.

Controlling assets and liabilities can increase profits and pay off debt. Here's a short course for managers in understanding the secrets of the balance sheet. Page 24. **NAHB's new president** says finding replacements for the thrift industry is going to be one of his major efforts. Page 28. **Selling seniors** can be tough; some tour projects so frequently, it becomes a hobby. Page 37. **Is your firm a Giant** Builder? To find out, return the coupon on page 42. This year's **NEST house** addresses the challenges of the new decade. Page 87.

Products that turn baths into luxury havens. Page 170.

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Quality And Stability: Hallmarks Of The 90s Housing Market

For years now, the housing industry has been advised to expect a disappointing decade during the 1990s. The relatively glum outlook for the decade is magnified by the immediate problems facing the industry.

The most menacing and unpredictable potential problems stem from the continuing troubles of the S&L industry. Not only are the troubles in this industry having the effect of severely restricting development and construction financing, but the number of foreclosed homes that these institutions are putting on the market have the potential to further aggravate current excess inventory problems.

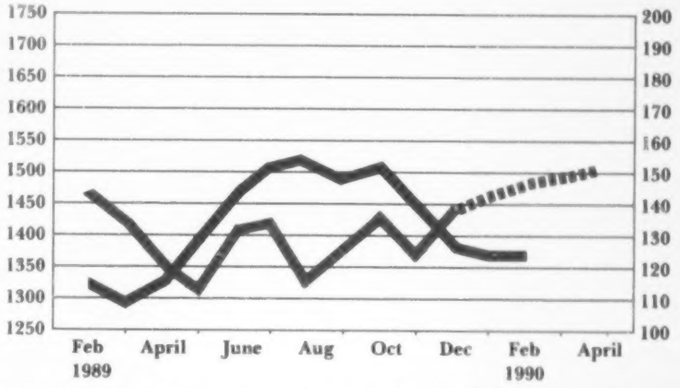
But despite the fact that declining numbers of young households will almost surely result in lower volumes of new construction activity during the 1990s, the optimist can nevertheless foresee numerous opportunities in the new decade.

The trend towards bigger, fancier new homes which has been with us since the mid-1980s will stay with us through this decade. The home buyers of the 1990s will be older, more affluent and, consequently, will have the financial means to be more quality-conscious than their counterparts of the 1960s and 1970s.

Finally, and perhaps most significantly, housing in the new decade will face a much less volatile market than at any time since the 1960s. Housing starts during this socially-turbulent decade averaged 1.41 million units, about the same number that most analysts expect to see during the average year in the 1990s. During the ten year period that began thirty years ago, annual starts totals were within an unusually narrow range: from a high of 1.60 million units in 1963 to a low of 1.17 million units during 1966. This kind of stability takes much of the risk out of planning, marketing and production and is the principal reason that — despite the likely downturn in the absolute volume of new construction — we expect a more profitable business environment for housing in the 1990s. ☐

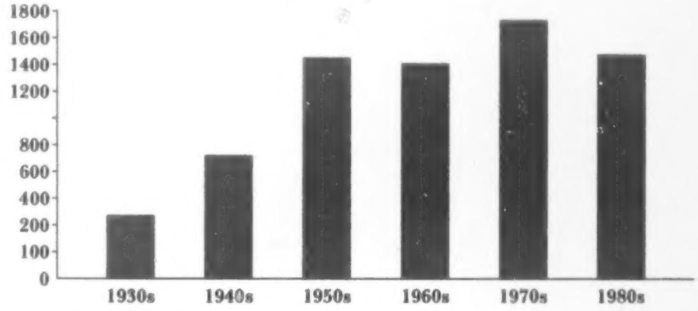
By Daryl Delano, Cahners Economics, Newton, Mass.

Professional Builder Leading Indicator And Housing Starts



Broken line denotes forecast. Leading Indicator of Housing predicts short-term changes in residential construction over approximately the next quarter. Latest figues is based on January data and includes the Standard and Poor's home-builder stock index, 90-day T-bills, bank reserves, consumer confidence index and the ratio of homes for-sale to those sold. Prepared exclusively for PB by Cahners Economics.

Total Private Housing Starts
(Annual average for decade; in thousands)



Source: U.S. Department of Commerce

Range In Number Of Annual Housing Starts Within Decade
(Ratio equals high divided by low)

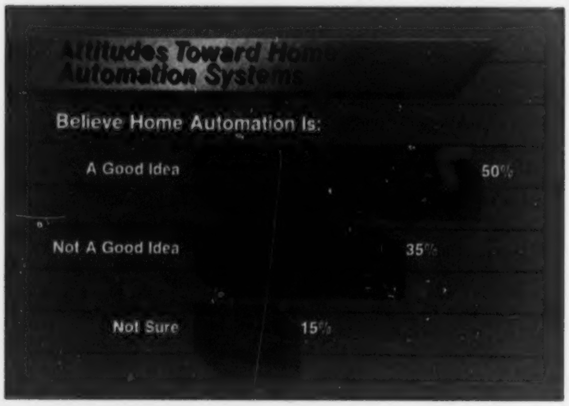
Decade	High	Year	Low	Year	Volatility ratio
1930s	458,000	1939	93,000	1933	4.9%
1940s	1,430,000	1949	139,000	1944	10.3
1950s	1,908,000	1950	1,175,000	1957	1.6
1960s	1,603,000	1963	1,165,000	1966	1.4
1970s	2,357,000	1972	1,160,000	1975	2.0
1980s	1,805,000	1986	1,062,000	1982	1.7

Source: U.S. Department of Commerce

Builders Switch On Home Automation Systems

By Dan McLeister, Senior Editor

Home electronics are reshaping American lifestyles. Here is what today's systems can do.



Homeowners were asked about a system offering energy savings, enhanced security, scheduled lighting and using telephones as intercoms. Source: Yankelovich Clancy Shulman and Parks Associates.

Buck Rogers and George Jetson, move over. Today's home automation systems and technology would make even your futuristic heads spin. Consider:

☐ The first violinist of the Cleveland Orchestra sits in his music room and utters "Tchaikovsky." The compact disk player automatically loads The 1812 Overture.

☐ A businesswoman is interviewed for the 6 p.m. TV news. She telephones home and programs her video-cassette recorder to tape the segment. While she's at it, she sets the VCR to record L.A. Law.

☐ It is the morning of the big party. The homeowner reprograms the security system so that the cleaning crew has access to the downstairs only, not the second floor.

☐ Vacationers read in USA Today that record rains are drenching their home town. They call their house to turn off the lawn sprinkler.

☐ Tucked comfortably under the covers, a housewife uses a master control panel next to the bed to: program the coffeepot to switch on the next morning, arm the security system, set back the furnace thermostat and turn out the lights throughout the house.

More homeowners are plugging into home automation systems that perform these tasks and more. The complexity and prices vary greatly, from simple plug-in devices to whole-house wiring and controllers; from $2000 systems to $90,000 systems.

Home automation is an industry still in its infancy. It has not yet reached its full potential. Manufacturers sell anywhere from fewer than 20 units a year to 700 units a year, if home automation is defined as a centralized control system integrating the control of other devices in the house. But include companies with other types of home control devices and the numbers would be much higher. Here's the difference:

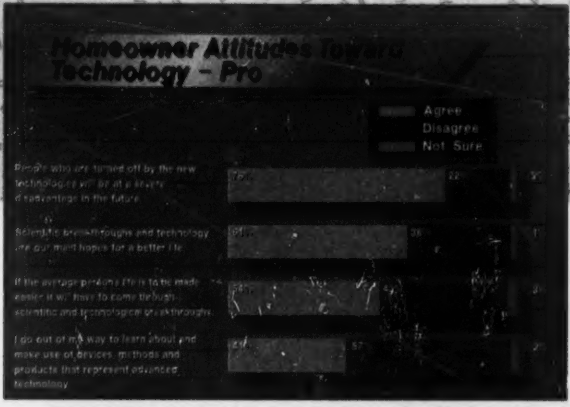
Builders already install such products as setback thermostats, wireless security systems and kitchen appliances such as dishwashers with a delay control so that the appliance comes on at night, when electricity rates might be lower. Homeowners move in with VCRs, plug-in light timers and automatic lawn sprinklers. What an integrated home automation system does is use a centralized controller to tie together all these separate functions.

For builders, home automation systems can be an excellent add-on product option. Many homeowners already think home automation is a good idea. And consumer research (some of which is summarized here) shows they would buy a home automation system if the price is right and the features of the system meet their needs.

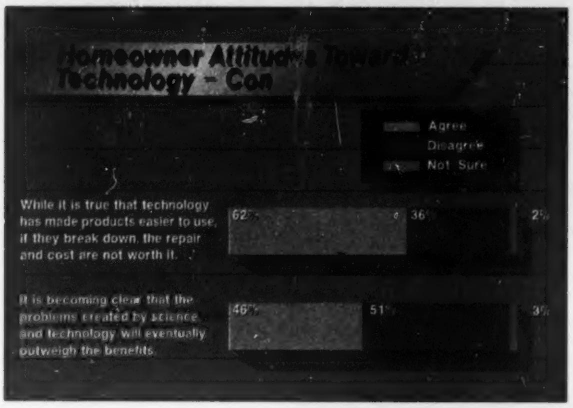
Fifty percent believe home automation is a good idea, but 35 percent say it is not. Another 15 percent are not sure, according to research by Parks Associates and Yankelovich Clancy Shulman. And 55 percent of homeowners like the idea of a central controller to adjust all home products from one central location in the house.

The price that attracts this size audience is $5000 or less, according to the research. Twenty-three percent said they

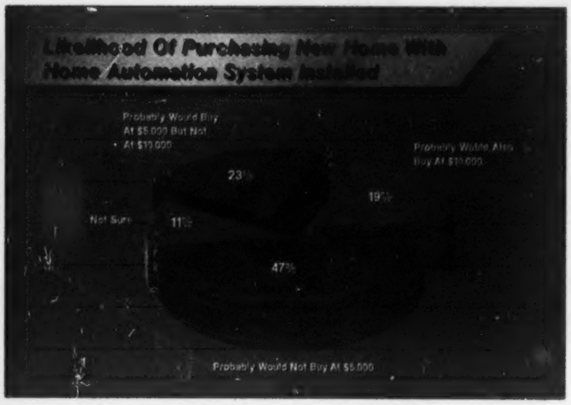
Continued on page 64



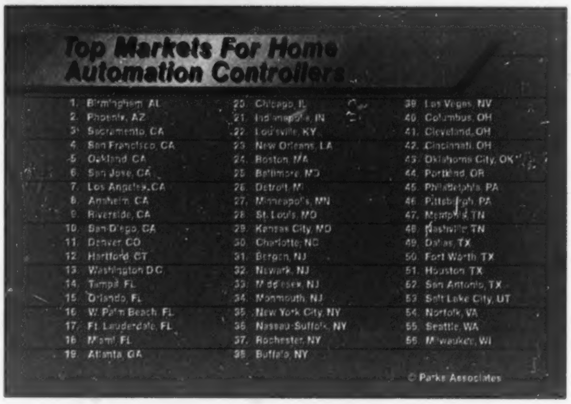
Left, consumers have to be convinced that technology is making their life easier.



Above, consumers have to be convinced that the new products are reliable and won't break down.



If the price is right—about $5000—homeowners would purchase a home automation system. Source: Yankelovich Clancy Shulman and Parks Associates.


Top Markets For Home Automation Controllers

1. Birmingham, AL
2. Phoenix, AZ
3. Sacramento, CA
4. San Francisco, CA
5. Oakland, CA
6. San Jose, CA
7. Los Angeles, CA
8. Anaheim, CA
9. Riverside, CA
10. San Diego, CA
11. Denver, CO
12. Hartford, CT
13. Washington D.C.
14. Tampa, FL
15. Orlando, FL
16. W. Palm Beach, FL
17. Ft. Lauderdale, FL
18. Miami, FL
19. Atlanta, GA
20. Chicago, IL
21. Indianapolis, IN
22. Louisville, KY
23. New Orleans, LA
24. Boston, MA
25. Baltimore, MD
26. Detroit, MI
27. Minneapolis, MN
28. St. Louis, MO
29. Kansas City, MO
30. Charlotte, NC
31. Bergen, NJ
32. Newark, NJ
33. Middlesex, NJ
34. Monmouth, NJ
35. New York City, NY
36. Nassau-Suffolk, NY
37. Rochester, NY
38. Buffalo, NY
39. Las Vegas, NV
40. Columbus, OH
41. Cleveland, OH
42. Cincinnati, OH
43. Oklahoma City, OK
44. Portland, OR
45. Philadelphia, PA
46. Pittsburgh, PA
47. Memphis, TN
48. Nashville, TN
49. Dallas, TX
50. Fort Worth, TX
51. Houston, TX
52. San Antonio, TX
53. Salt Lake City, UT
54. Norfolk, VA
55. Seattle, WA
56. Milwaukee, WI

© Parks Associates

Right, factors such as family incomes, crime rates and energy costs determine the top metropolitan areas for home automation. Source: Parks Associates.

Continued from page 60

would probably buy at $5000 but not at $10,000. And 19 percent said they probably would buy at $10,000 (pie chart).

Consumers who are most likely to buy a home automation system (costing at least $5000) have higher household incomes than most.

In other words, move-up households of the baby boom generation are the likely target market. But according to *Professional Builder*'s 1990 Consumer Survey, older homeowners (empty nesters and retirees) most like the safety and security features of an "intelligent house" automation system.

But for home automation to catch on, builders have to look beyond the demographic data and examine consumers' ideas about technological change. Technological breakthroughs in products bring a variety of homeowner attitudes toward technology.

Those surveyed by Yankelovich Clancy Shulman and Parks Associates say technology is the main hope for a "better life" and necessary to keep abreast of future change. But in practice, many people have found technological change to be a disappointment.

They say many new products are difficult to understand and expensive to service. Forty percent of those surveyed said they sometimes suffer from "featuritis"—having difficulty understanding and operating the large array of features available on new products.

Opinions on many aspects of home automation are not firmly held since the concept of home automation was new to many of those people interviewed, the study pointed out. "Rather, they are open to change—an opportunity for manufacturers to tailor the 'packaging of home automation systems to the unique needs of consumers today and to pave the way to greater receptivity in the future.' "

People in some areas of the country will be more receptive to home automation than people in other areas. Of the 250 metropolitan areas in the country, Parks Associates identified 56 that offer the optimal markets for home automation equipment (table).

On the following pages are details on some home automation systems installations. Even Buck Rogers might shake his head in awe at what is available in the '90s. □

Continued on page 70

Homeowners Can Dial Many Wishes To Controller

Continued from page 64

Photo: Everett & Soulé

Aladdin had a magic lamp in a fairy tale of long ago. Now Aladdin provides modern wonders with the integration of controls for lighting, air conditioning and heating, entertainment, security, pools and spas and lawn sprinklers.

Instead of rubbing a lamp to get a wish, a homeowner can dial her house from the car and tell Aladdin to have a bubbling whirlpool bath awaiting her at the end of a hectic day.

Builder Quorum Homes installed the Aladdin Home Automation System (by IntelliNet Corp. of Naples Fla.) in The New Southern Home, an idea house in Orlando, Fla., designed by The Evans Group.

IntelliNet sold 12 Aladdin systems in 1989, said Charles Kropke, vice president of marketing and sales. The most popular part of the Aladdin system is lighting control: 100 percent of the buyers take that feature.

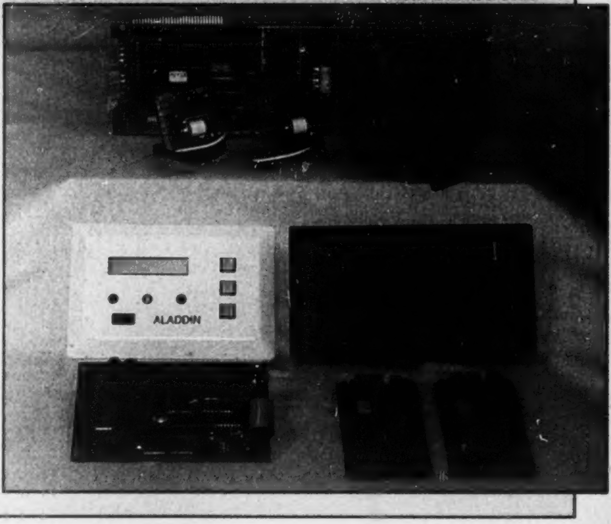
Aladdin consists of a dedicated controller that connects to units located in each living area. Hundreds of combined sequences are available such as closing curtains, dimming lights and turning on soft music.

The highest-priced system cost $30,000 and the lowest $15,000. The majority of the systems sold for about $25,000, Kropke said.

A combination of younger professionals and older people bought the Aladdin for houses priced at $500,000 and above. Nine of the systems were installed in new houses and three in existing houses.

IntelliNet sold through dealers 50 percent of the time, and through builders 25 percent of the time. The rest of sales resulted from direct contact with customers. □

Continued on page 78



Programmed System Can Help Forgetful Person

Continued from page 70

Homeowners sometimes forget to arm their security systems. But a product sold by a firm near New Orleans remembers to do that. The system can be programmed to turn itself on and off at designated times of the day or night.

With the lowest-priced model set at $2200, Home Automation Inc. of Metairie, La., has sold 75 units since January 1989 through dealers in the United States and Canada. More than 60 of the installations were in existing homes. The rest were in newly constructed dwellings.

Much of the control is done by X-10 modules that plug into existing house wiring, though some extra hard wiring is needed to connect pool pumps, sprinklers and air conditioners to a central controller. Event buttons can be set to perform a series of home automation activities by entering the event button from the system console or by a telephone call to the system controller.

The least expensive system, at $2200, includes one motion detector, four intrusion detectors at doors and windows for security. Some light control is also included. A system costing about $3400 includes coverage at all doors and windows, three motion detectors, controls for eight lights and air conditioner.

Home Automation systems have been priced as high as $5800. Most are sold in the $3000 range. Most are sold for houses priced in the $150,000 to $250,000 range, said Jay McLellan, president of Home Automation.

Whatever controls people choose, it is the integration of controls that they find interesting, he said. They can press buttons and have everything taken care of. □

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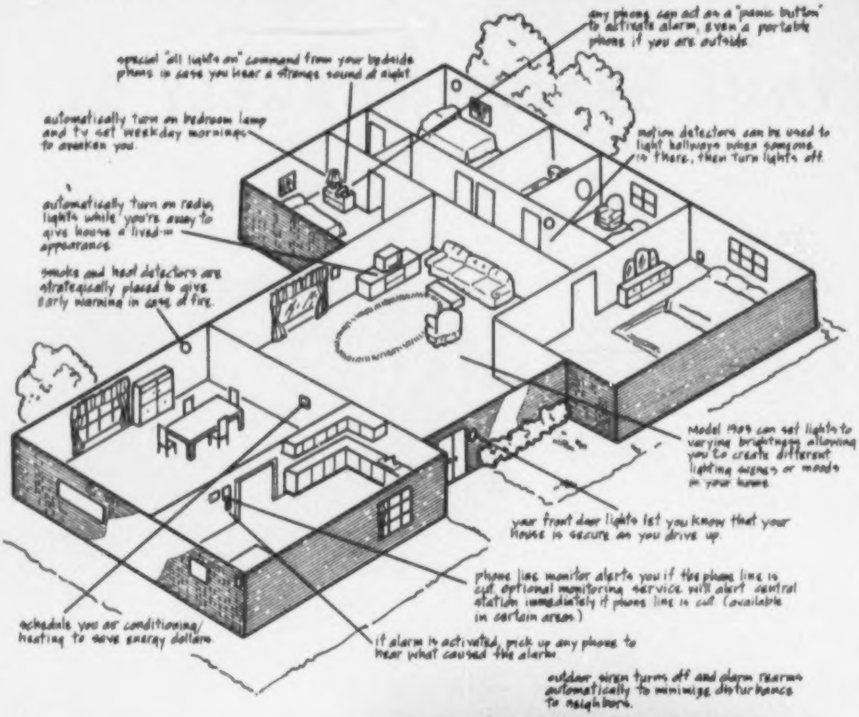
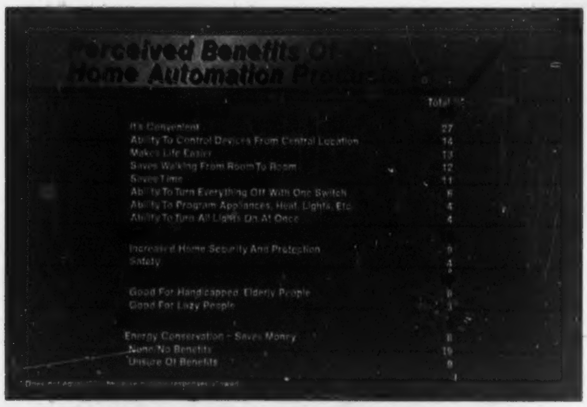

any phone can act as a "panic button" to activate alarm, even a portable phone if you are outside.
special "all lights on" command from your bedside phone in case you hear a strange sound at night
automatically turn on bedroom lamp and tv set weekday mornings to awaken you.
motion detectors can be used to light hallways when someone is there, then turn lights off.
automatically turn on radio, lights while you're away to give house a lived-in appearance
smoke and heat detectors are strategically placed to give early warning in case of fire.
Model 1909 can set lights to varying brightness allowing you to create different lighting scenes or moods in your home.
your front door lights let you know that your house is secure as you drive up.
phone line monitor alerts you if the phone line is cut. optional monitoring service will alert central station immediately if phone line is cut (available in certain areas)
schedule you air conditioning/heating to save energy dollars
if alarm is activated, pick up any phone to hear what caused the alarm
outdoor siren turns off and alarm rearms automatically to minimize disturbance to neighbors.

Table top console controls home automation system, above. Drawing, left, shows security and convenience features throughout a house. Convenience tops list of perceived benefits for home automation in survey of homeowners. Source: Yankelovich, Clancy, Shulman and Parks Associates



Perceived Benefits Of Home Automation Products

	Total %
It's Convenient	27
Ability To Control Devices From Central Location	14
Makes Life Easier	13
Saves Walking From Room To Room	12
Saves Time	11
Ability To Turn Everything Off With One Switch	6
Ability To Program Appliances, Heat, Lights, Etc	4
Ability To Turn All Lights On At Once	4
Increased Home Security And Protection	9
Safety	4
Good For Handicapped, Elderly People	6
Good For Lazy People	3
Energy Conservation – Saves Money	8
None/No Benefits	19
Unsure Of Benefits	9

Convenience Sells The Systems

Photo: GE Plastics

Command By Voice Turns On Specific Music

Continued from page 78

Imagine a person lying in bed who says "Tchaikovsky" and music starts playing. You may think this scenario is a fantasy. It's not. Such a chain of events is possible with a home automation system by Custom Command Systems of College Park, Md.

When the system's controller hears the person's voice, it turns on the compact disc player in the media room, selects the CD and channels the music to speakers in the bedroom.

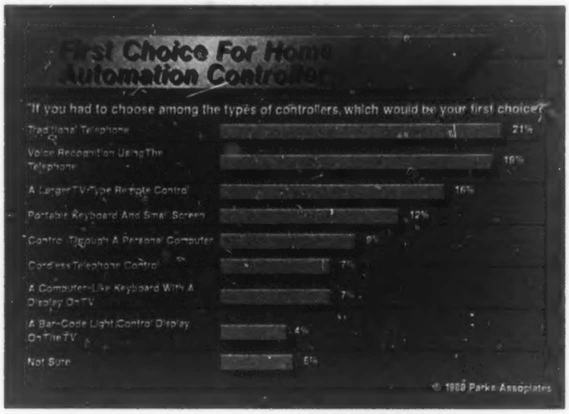
Prices start at $40,000 and have gone over $200,000, said Hank Levine of Custom Command Systems. Most of the sales have fallen in the $60,000 to $90,000 price range. The company offers three systems that control entertainment, automation and security features.

The voice recognition system that makes the selection of music possible is only one method of control that the company offers. Others include touch screens, hand-held remote controllers, touch switches and telephones.

In one installation, one control panel is used to operate the home's audio/video entertainment, security, lighting, heating and cooling and telephone/intercom subsystems. Typically, buyers are often in their 50s and many are founders of companies, Levine said.

Systems are installed in homes priced at about $1 million and containing as much as 10,000 square feet or more. The system also was installed in the Living Environments concept house built for GE Plastics of Pittsfield, Mass. The control panel is seen in the kitchen.

A total of 15 systems were sold in 1989. Another 15 systems were sold in the previous 1½ years. ☐



Many homeowners would like to control their system by telephone. Source: Yanelovich Clancy Shulman and Parks Associates.

Why Homeowners Select Automation Systems

Homeowners are looking for better ways to manage all the equipment in their houses. Unity Systems of Redwood City, Calif., provides a method to do that with its Home Manager system.

The reasons for selecting the Home Manager were:

1. Comfort/energy savings. The system allows room-by-room temperature control.
2. Security/safety. Homeowners can limit visitor access to certain areas of the house, and to certain times and days of the week.
3. Greater control/convenience. Homeowners can enjoy automatic scene-setting with preset dimming levels. Or they can change all the lights in a room to create a different mood with a single code at the keypad.

More and more,

Builder Sees System As A Traffic Builder

Wall-mounted unit is one method of control for the PAL home control system.

Builders can always use a pal. Builder Del Purscell of The Orleans Co. near Philadelphia has found a new PAL—a home automation system which he expects will lead to more customer traffic because of the public interest in home automation.

PAL, a trademark of the Square D Co., Palatine, Ill., stands for Personally Automated Lifestyles, a home automation system. Square D is developing the system along with Teletimer International Inc. of Boca Raton, Fla. and Bell Atlantic of Philadelphia.

One of the first installations for PAL will be in The Orleans Idea Home located in a shopping center.

The system, which will be installed in April, will control items from lights and appliances to the telephone and audio and video systems. In the morning the PAL system can activate the cooling or heating system, wake the homeowners, start the coffee and turn on the water heater for showers.

The system, which will be commercially available sometime in 1991, controls a wide variety of devices to provide improved home comfort, convenience, energy management and conservation, security and entertainment.

It is designed with a building block concept of control modules so homeowners will be able to select among them to customize a system.

A switch module controls up to eight lights or appliances wired to remote-controlled wall switches. The telephone control module provides an in-home network, including phone-to-phone intercom and the ability to handle up to four lines and eight extensions.

The modularity of the system is one thing that Purscell said excites him. Homeowners will be able to take as little or as much as they want. ☐

Unity's products are going into tract housing, rather than custom-built homes. Custom houses used to account for 80 percent of sales. That number is expected to be 45 percent this year.

The company sold 600 units in 1989 compared to 800 during the rest of the 1980s.

The percentage of systems put in new houses in 1989 remained in the 90 percent range. But the percentage put in tract houses has changed from 20 percent in the early 1980s to 45 percent in 1989 and an expected 55 percent this year.

The bulk of home buyers selecting the Home Manager are 40 to 55 years old. This age group is expected to drop to 65 percent from 70 percent this year. Sales to those under 40 years of age are increasing. Sales to home buyers age 55 years and older are to remain the same this year. ☐

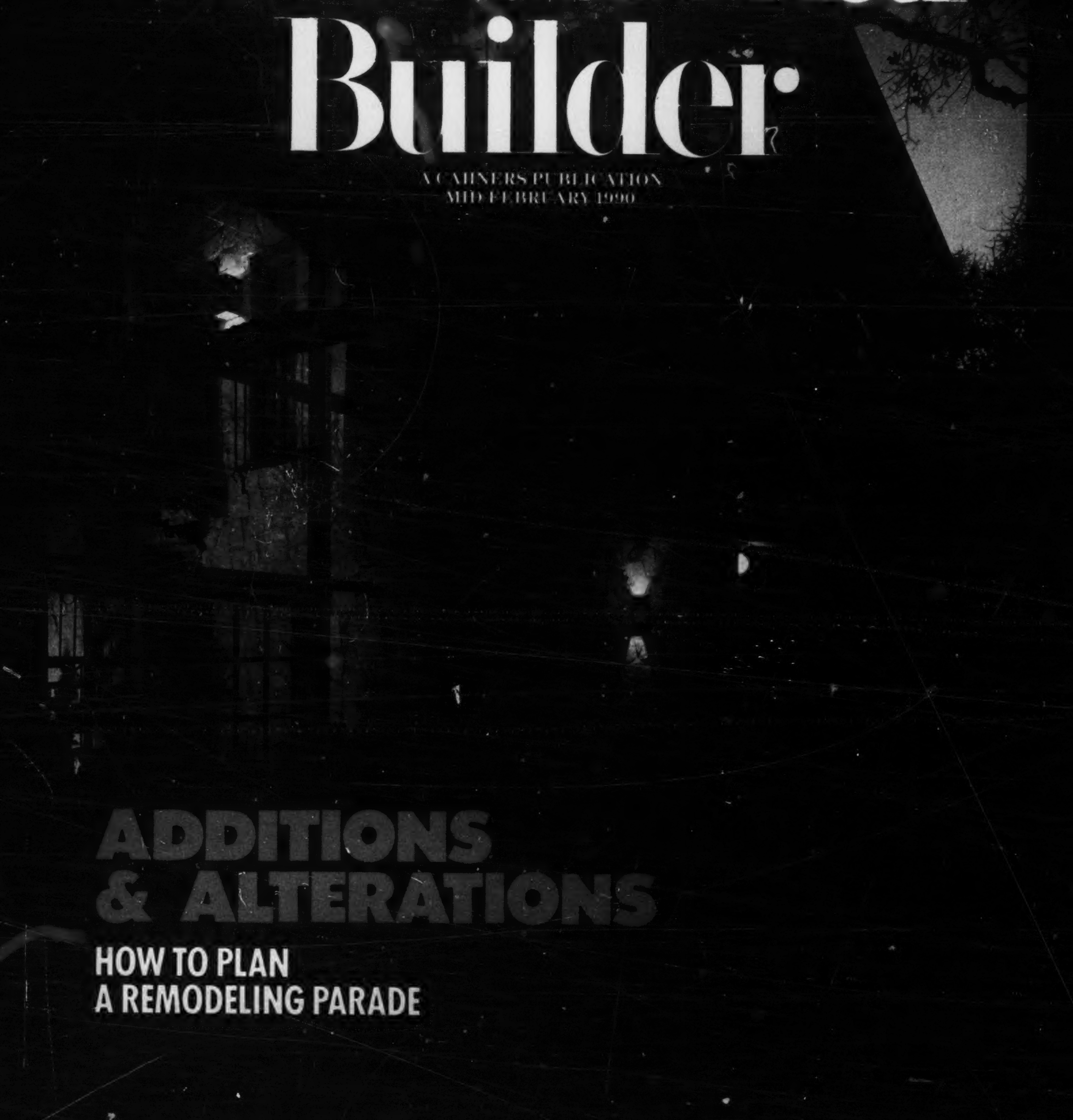
Control panel on touch screen shows how maid can be allowed limited access to certain areas of a house.

C/750-Y

REMODELING

Professional Builder

A CAHNERS PUBLICATION
MID FEBRUARY 1990



ADDITIONS & ALTERATIONS

HOW TO PLAN
A REMODELING PARADE

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UPFRONT

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Remodelers find the market warm. Page 20.
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FEATURES

The Grand Tour/64

Remodelers in Grand Rapids, Mich., successfully staged a parade of remodeled homes. For an arm chair tour and a few helpful hints on how to put on your own parade, turn to page 64.

How Homeowners Plan To Remodel/74

Why do consumers want to add a room? What kind of room do they want to add? An exclusive *Professional Builder* survey relates consumer preferences for projected room additions and alterations.

Putting On The Ritz/80

Whether it is a solution to a tricky problem or the addition of space, remodeling has always been innovative. These high-end jobs showcase remodelers' skills.

PRODUCT SHOWCASE/88

HOUSE PLANS/121

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Remodeling Surge Promises New Opportunities

See lower interest generating growth rate of 10% this year and again in 1991.

Despite a few years of only moderate growth, remodeling continues to offer the most consistent range of opportunities for the residential contractor.

Spending for remodeling work increased throughout the 1980s, even as new construction faltered during the latter part of the decade.

Following a disappointing first half of the year, a period of time when interest rates rose and household income began to slow, residential remodeling spending picked up during the final months of 1989.

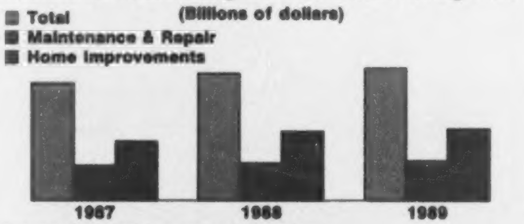
Many homeowners who postponed plans for major addition and alteration work will be spurred on by lower financing costs this year.

Consequently, we expect expenditures on residential additions and alterations to rise to $48.3 billion this year and to $53.9 billion in 1991. This represents average annual growth of about 10 percent, a significant improvement over the average 4.8 percent annual gains which prevailed during the 1987-1989 period.

There are a number of long-term factors which should ensure healthy gains in residential remodeling spending throughout the 1990s.

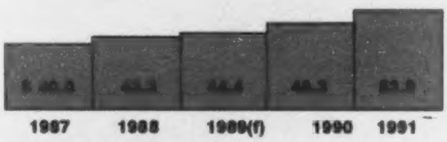
The nation's housing stock is aging and is in increasing need of maintenance and repair work.

Residential Remodeling Will Accelerate During 1990



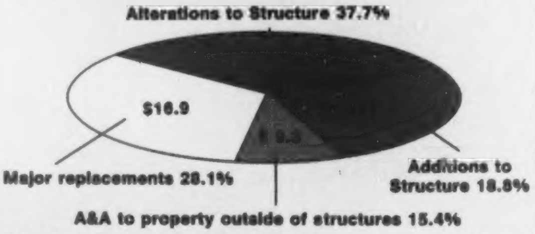
Source: U.S. Department of Commerce; forecast: Cahners Economics

$48.3 Billion In Additions, Alterations During 1990



Source: U.S. Department of Commerce; forecast: Cahners Economics

1988 Residential Improvement Spending By Category



Source: U.S. Department of Commerce

Top Markets In 1990 For Residential Remodeling Work
(Rankings Based On Projected $ Value of Bldg. Permits)

1. Los Angeles-Long Beach
2. San Francisco
3. Washington, D.C.
4. Philadelphia
5. Chicago
6. Baltimore
7. New York
8. Boston
9. Anaheim-Santa Ana, Calif.
10. Detroit

Forecast: Cahners Economics

The average age of homeowners continues to increase, creating more stable, less mobile households that are interested in improving their current homes.

Sales of existing homes as a proportion of total home sales should increase during the decade creating an environment conducive to the mix up and customizing impulses of the population. Also, despite a leveling off in the growth of home equity loans during 1989 on the order of 20 percent, following gains averaging 35 percent the prior two years, Federal tax law should ensure a ready pool of fairly inexpensive financing for home improvement projects in the years ahead.

In the near term, some parts of the nation will enjoy higher levels of residential remodeling work than others. During 1989, building permits authorizing residential remodeling work rose by about 15 percent in the West, while actually declining by a modest 4 percent in the Northeast. Among the fastest growing areas for remodeling work last year were Seattle, Honolulu and San Francisco. On the other hand, some major metropolitan areas, including Boston, New York and Chicago saw the value of residential remodeling work decline. ☐

By Daryl Delano, Cahners Economics, Newton, Mass.

Remodelers Find The Market Is Warm

A nationwide survey of remodelers indicates that business is steady, if not booming, in most parts of the country.

Remodelers continue to profit from the consumer drive for home improvement. According to a recent survey by *Professional Builder*, 57 percent feel the remodeling market is warm. And nearly 43 percent of remodelers in the Western states said they were dealing with a hot market.

Most of their customers (78.9 percent) are paying cash. The remainder are financing projects with home equity loans (63.1 percent), second mortgages (37.5 percent), and FHA loans (7.8 percent), or having the work financed by the remodeling company (7.2 percent).

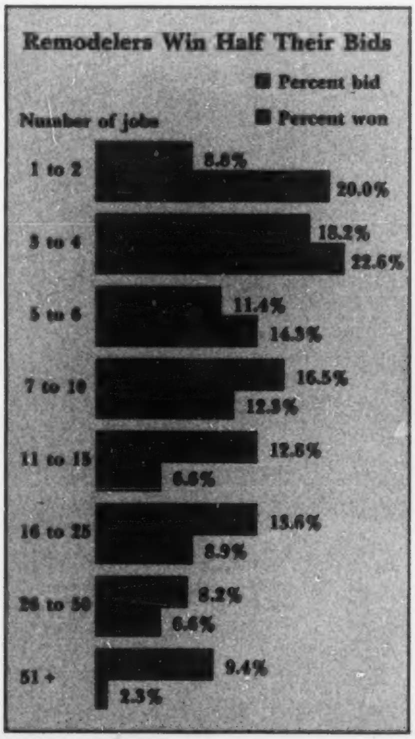
As of October 1989, when the survey was conducted, 32.1 percent were paying interest rates between 10 and 10.9 percent, and 45 percent paid between 2 and 2.9 points on their loans.

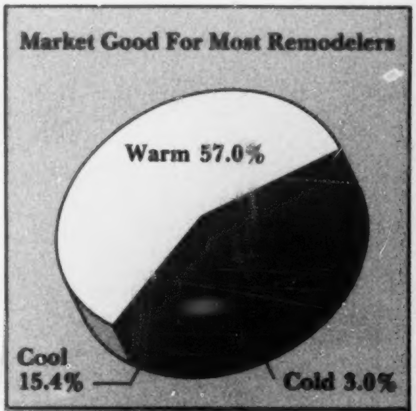
Remodelers bid on an average of 20 jobs during the six months prior to the survey, and won about half the bids. About 65 percent said they completed those jobs on budget; 18.3 percent were over budget, and 17 percent were under budget. In the Northeast 83.3 percent said work was completed on budget.

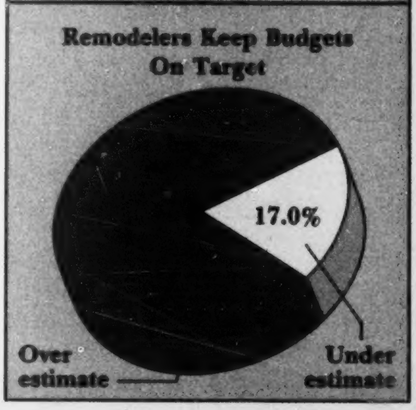
Roughly half of the remodelers surveyed use computers in their operations. Word processing and general accounting are the most frequent applications (41.4 percent), but 26.0 percent also use computers for job costing, 23.2 percent for estimating, and 11 percent for design.

The survey also indicated that 61.8 percent of remodelers plan to hire skilled or unskilled labor in the near future. Of this group, 89.3 percent plan to hire skilled labor and 69.2 percent plan to hire unskilled labor. Nearly 40 percent said they would hire two laborers from each category. ☐

By Susan Bady, Associate Editor







Most Customers Pay Cash

Financing	Total	Northeast	North Central	South	West
Cash	78.9%	72.6%	76.9%	76.9%	93.2%
Home equity loan	63.1	67.7	65.9	56.0	59.3
Second mortgage	37.5	37.1	35.2	40.7	32.2
FHA loan	7.8	6.5	8.8	6.6	3.4
By remodeler	7.2	1.6	12.1	7.7	—

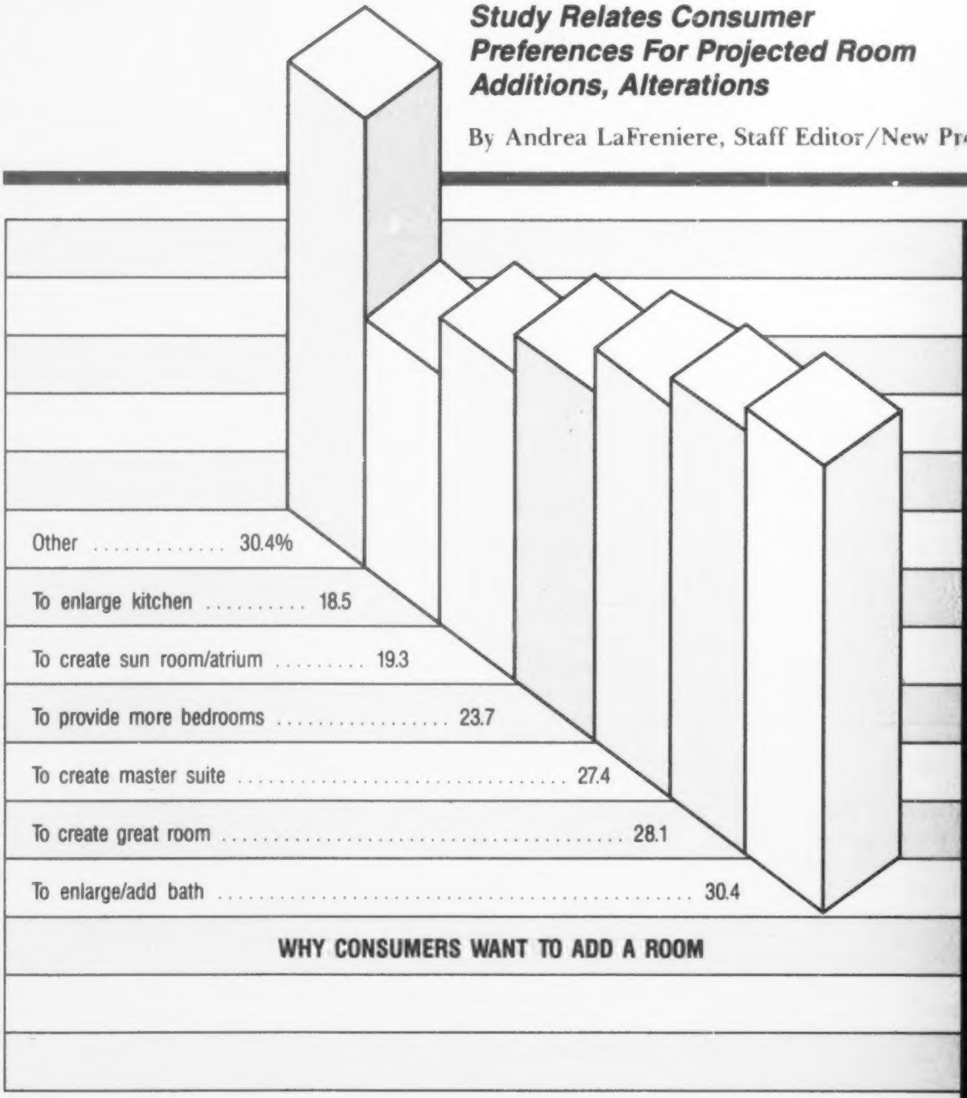
Of all remodelers surveyed, nearly 80% reported their customers pay cash for remodeling jobs. In the West, this figure is even higher—93%.

PROFESSIONAL BUILDER SURVEY

HOW HOMEOWNERS PLAN TO REMODEL

Study Relates Consumer Preferences For Projected Room Additions, Alterations

By Andrea LaFreniere, Staff Editor/New Products



WHY CONSUMERS WANT TO ADD A ROOM

Which rooms do homeowners intend to remodel? How many square feet do they plan to add? Is a room addition in the picture?

These are just a few of the questions that *Professional Builder* asked consumers in a landmark survey designed to pinpoint the plans of homeowners who intend to remodel their home in the next 12 months and who plan to hire a professional to do the work.

National Family Opinion Inc., a nationally recognized consumer research company, Toledo, Ohio, conducted the survey for *Professional Builder*.

Complete results report answers by region of the country, family size, age of the head of household, length of ownership, household income, age of house, size of house and market value.

Copies are available for $395. Send check or money order to *Professional Builder*, Post Office Box 5080, Des Plaines, Ill., 60017-5080.

The following report completes a two-part series of survey results initiated in *Professional Builder*'s Mid-September, 1989 Kitchen & Bath Remodeling issue. Most of the information about consumer plans for kitchen and bath remodeling projects is provided in that issue. Any additional information about wet room additions or alterations included here is offered for the benefit of readers.

Among the significant survey results included in this report is information about why consumers want to alter or add a room, what kinds of room additions they want to have done by a professional contractor and what kinds of products and design elements they want included in these room additions.

TYPES OF ROOM ADDITIONS CONSUMERS WANT DONE WITHIN THE NEXT 12 MONTHS

	Total	Expected Cost Mean	Expected Cost Median
Add a room	17.2%	$19,571	$15,000
Enclose porch/patio	12.5	4059	2500
Finish basement	8.1	4827	3000
Add garage	6.6	6374	5000
Add bathroom	3.9	4424	3000
Expand/finish attic	2.0	3275	2250
Add sun room	6.0	7938	5550
Redesign/restructure interior	5.0	21,696	8500
Complete exterior face lift	11.8	7756	4675

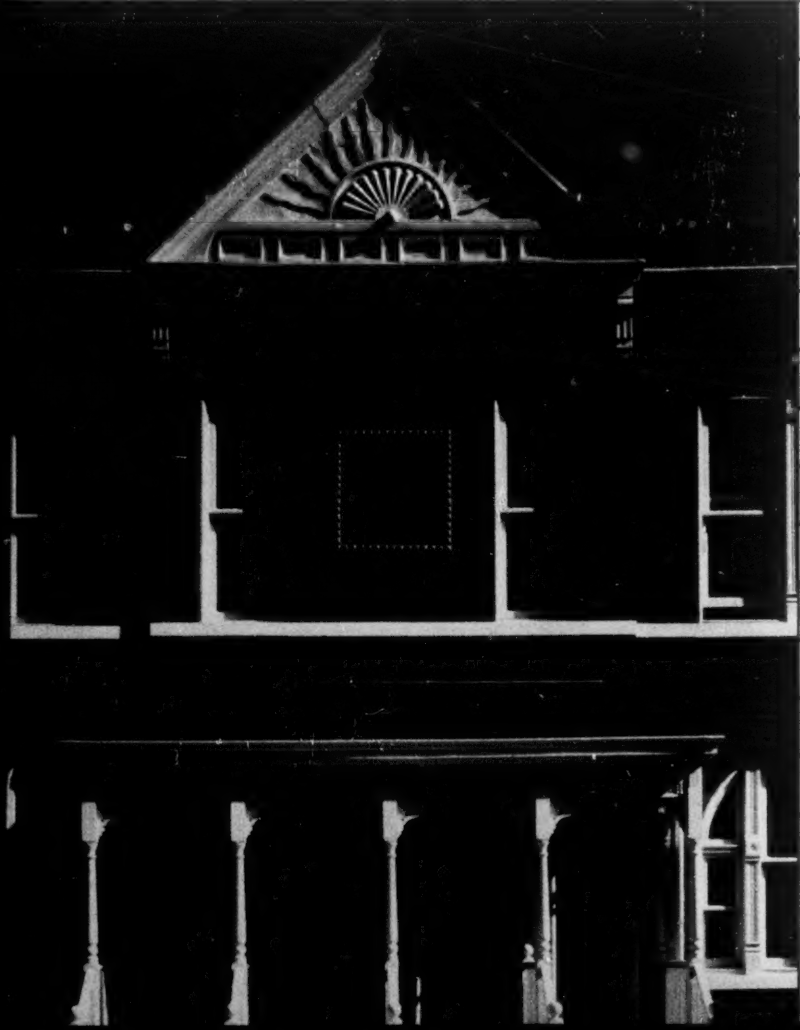
Homeowners are willing to pay the price for a quality job

For starters, of the respondents who intend to add a room, 30.4 percent said they would expand or create a bath. Of these, nearly 37 percent live in homes built 29 to 63 years ago.

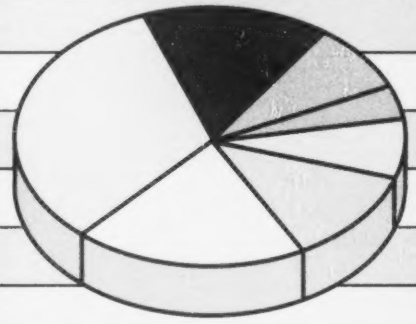
Of the 28.1 percent who said they would create a great room, 92 percent have owned their home for at least three years.

Nearly half the consumers who want to create a sun room own homes with more than 2200 square feet of space. Another 50 percent have lived in their homes for less than five years. The survey suggests that the percentage of homeowners who want to add a sun room tends to decrease with the age of the home.

According to the survey, most of the homeowners who want to provide more bedrooms are consumers aged 40 years or less (40.6 percent). Another 50 percent have



AGE OF HOMES BEING REMODELED



☐ **5.4%** built before 1900

☐ **8.0%** built from 1900 to 1925

■ **14.0%** built from 1926 to 1945

☐ **27.2%** built from 1946 to 1960

☐ **26.1%** built from 1961 to 1973

☐ **11.4%** built from 1974 to 1980

☐ **7.9%** built in 1981 or later

owned their home for less than five years. Typically these homes have less than 1500 square feet of space and were built no more than 16 years ago.

The survey indicates that the number of consumers who want to create a master suite (27.4 percent of those who plan to add a room) tends to increase with the market value of the home and with the homeowner's household income.

The survey also suggests that, by and large, respondents who plan to add more space by expanding the kitchen (18.5 percent) have owned their homes for more than five years. The percentage of homeowners who want to enlarge this particular living area tends to increase with household income.

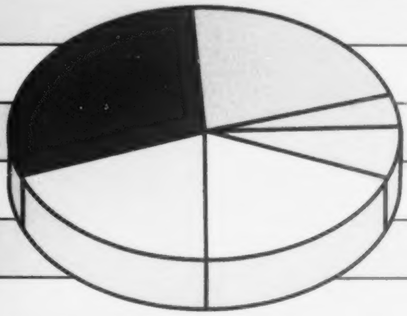
Although they plan to add or expand different kinds of space, respondents who want to make a room addition did concur on an important point: they are willing to pay the price for a quality job. Those surveyed expect to pay a mean cost of $19,571 and a median cost of $15,000 to add or expand a room or rooms.

The survey also indicates that the median amount of space homeowners expect to add is 305 square feet. The mean amount of space they expect to add is 426 square feet.

According to the survey, more than half the homes slated for a room addition or alteration were built between 1946 and 1973. Nearly 14 percent were built between 1926 and 1945, and roughly 11 percent were built between 1974 and 1980.

Among the design elements homeowners want included in their room addition or alteration is space for family entertainment. This is particularly evident among

SQUARE FEET CONSUMERS EXPECT TO ADD



DESIGN ELEMENTS INCLUDED IN ROOM ADDITION

	Total %	Household Size		
		1	2	3
Space for family entertainment	**47.0%**	33.3	41.2	52.1
Sun room or greenhouse	**31.6**	41.7	44.1	23.9
Raised, but flat ceilings	**24.8**	16.7	23.5	26.8
Space for full-/part-time office	**24.8**	16.7	20.6	28.2
Cathedral, vaulted-type ceilings	**23.9**	41.7	20.6	22.5
Dramatic window treatment	**23.1**	33.3	14.7	25.4
Interior plant shelves/niches	**22.2**	58.3	26.5	14.1
Home entertainment center	**20.5**	25.0	20.6	19.7
Built-in furniture	**12.8**	16.7	5.9	15.5
Space for formal entertaining	**9.4**	16.7	2.9	11.3
Home fitness center	**6.8**	16.7	5.9	5.6
Covered entries	**6.8**	25.0	5.9	4.2
Private living space for relative	**6.8**	8.3	2.9	8.5
Interior lofts or balconies	**6.0**	8.3	5.9	5.6

Consumers want particular products, design elements included in room additions

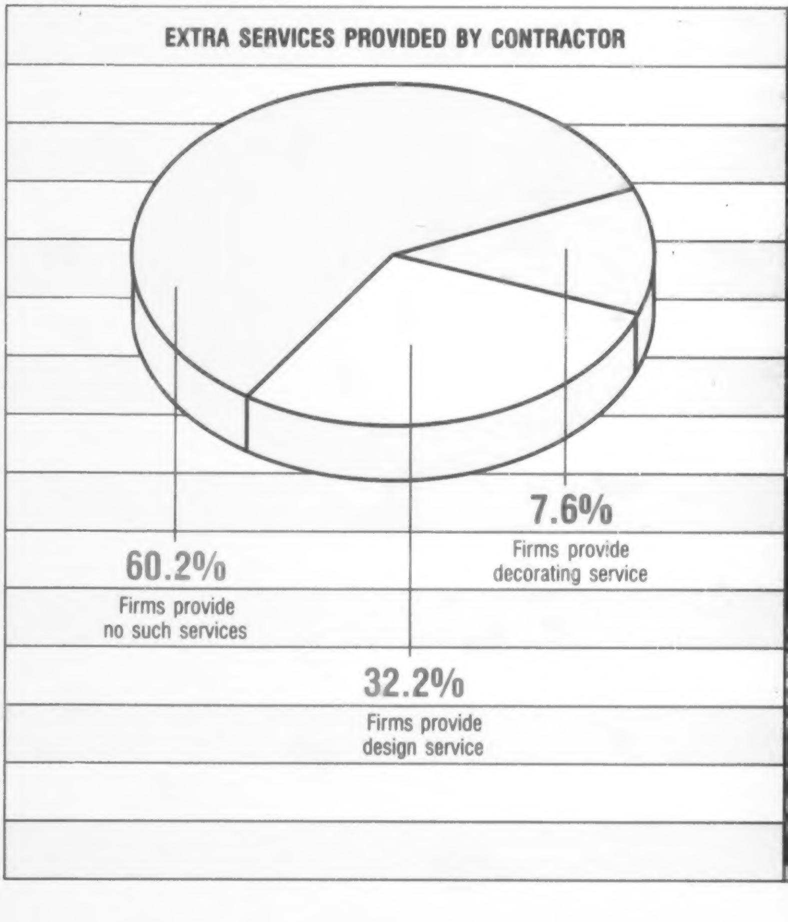
consumers who live in homes that are more than 44 years old.

Owners of such older homes also tend to want such design elements as raised, flat ceilings, space for full/part time office, interior plant shelves/niches, built-in furniture and home entertainment centers.

The survey shows that the percentage of consumers who want dramatic window treatments included in the remodeling job tends to increase with home market value, square footage of home and household income.

Consumers have definite ideas about the kinds of products they want to see included in their room addition as well. A whopping 98.5 percent will specify a specific type of flooring product. For 66.9 percent of these, carpeting is the definite choice. Ceramic tile and wood-type floors, respectively, received the next highest number of

EXTRA SERVICES PROVIDED BY CONTRACTOR



responses.

A significant portion of consumers also intends to improve the fenestration of their homes. Of those who plan to add or expand a room, 92.6 percent will include windows in the project and 90.4 percent will include doors.

Although consumers have definite ideas about design elements and products they want to see in their room additions or alterations, not all intend to rely on their own design ideas alone. One-third of respondents indicated that they select builder/remodelers who also provide design services. Slightly less than 8 percent hire contractors who provide decorating service.

Prudent remodelers will be sure to meet the consumer demands outlined in this report throughout the course of each room addition or alteration. □

PRODUCTS INCLUDED IN ROOM ADDITION

	Home market value in thousands			
	$99 & under	$100 to $199	$200 to $299	$300 plus
FLOORS	**98.2%**	**100.0%**	**95.7%**	**100.0%**
Carpet	71.9	61.0	52.2	85.7
Ceramic tile	8.8	39.0	47.8	14.3
Wood	19.3	17.1	52.2	28.6
Vinyl	22.8	19.5	4.3	7.1
Marble	—	2.4	4.3	7.1
WINDOWS	**89.5**	**95.1**	**95.7**	**92.9**
Other windows	50.9	48.8	65.2	28.6
Skylight	19.3	34.1	30.4	57.1
Bay	17.5	14.6	34.8	42.9
Sun room	10.5	22.0	13.0	14.3
Greenhouse	7.0	22.0	13.0	7.1
Decorative window	7.0	9.8	17.4	21.4
WALLS	**89.5**	**90.2**	**95.7**	**85.7**
Paint	75.4	75.6	73.9	85.7
Wallpaper	31.6	39.0	39.1	21.4
Ceramic tile	8.8	9.8	17.4	14.3
Marble	—	2.4	4.3	—
DOORS	**89.5**	**92.7**	**95.7**	**78.6**
Exterior doors	54.4	56.1	78.3	50.0
Interior doors	61.4	43.9	69.6	42.9
Patio doors	19.3	34.1	26.1	28.6
Garage doors	8.8	—	13.0	14.3
ROOFING	**78.9**	**78.0**	**73.9**	**100.0**
Asphalt fiberglass shingles	71.9	68.3	65.2	57.1
Cedar shingles/shakes	3.5	9.8	13.0	35.7
Metal tile	3.5	—	—	—
Clay tile	—	—	—	7.1
SIDING	**84.2**	**68.3**	**82.6**	**78.6**
Wood	26.3	19.5	30.4	21.4
Aluminum	26.3	17.1	13.0	—
Brick	14.0	14.6	8.7	35.7
Vinyl	15.8	12.2	17.4	7.1
Wood shakes	3.5	9.8	21.7	21.4
Hardboard	1.8	2.4	—	—
LIGHTING	**70.2**	**75.6**	**73.9**	**64.3**
Recessed	43.9	46.3	47.8	35.7
Fluorescent-ceiling	29.8	31.7	21.7	14.3
Track	12.3	14.6	26.1	21.4
OTHER ITEMS	**82.5**	**95.1**	**91.3**	**71.4**
Insulation	61.4	61.0	78.3	50.0
Ceiling fan	50.9	46.3	43.5	42.9
Cabinets	31.6	34.1	52.2	28.6
Closet shelving	35.1	36.6	43.5	14.3
New heating system	19.3	31.7	17.4	21.4
Thermostats	8.8	24.4	30.4	35.7
Fireplace	17.5	14.6	21.7	28.6
Air cond. system	10.5	22.0	26.1	28.6
Decorative molding	8.8	24.4	17.4	35.7
Door chimes	3.5	2.4	4.3	7.1
Central vacuum	—	2.4	—	7.1

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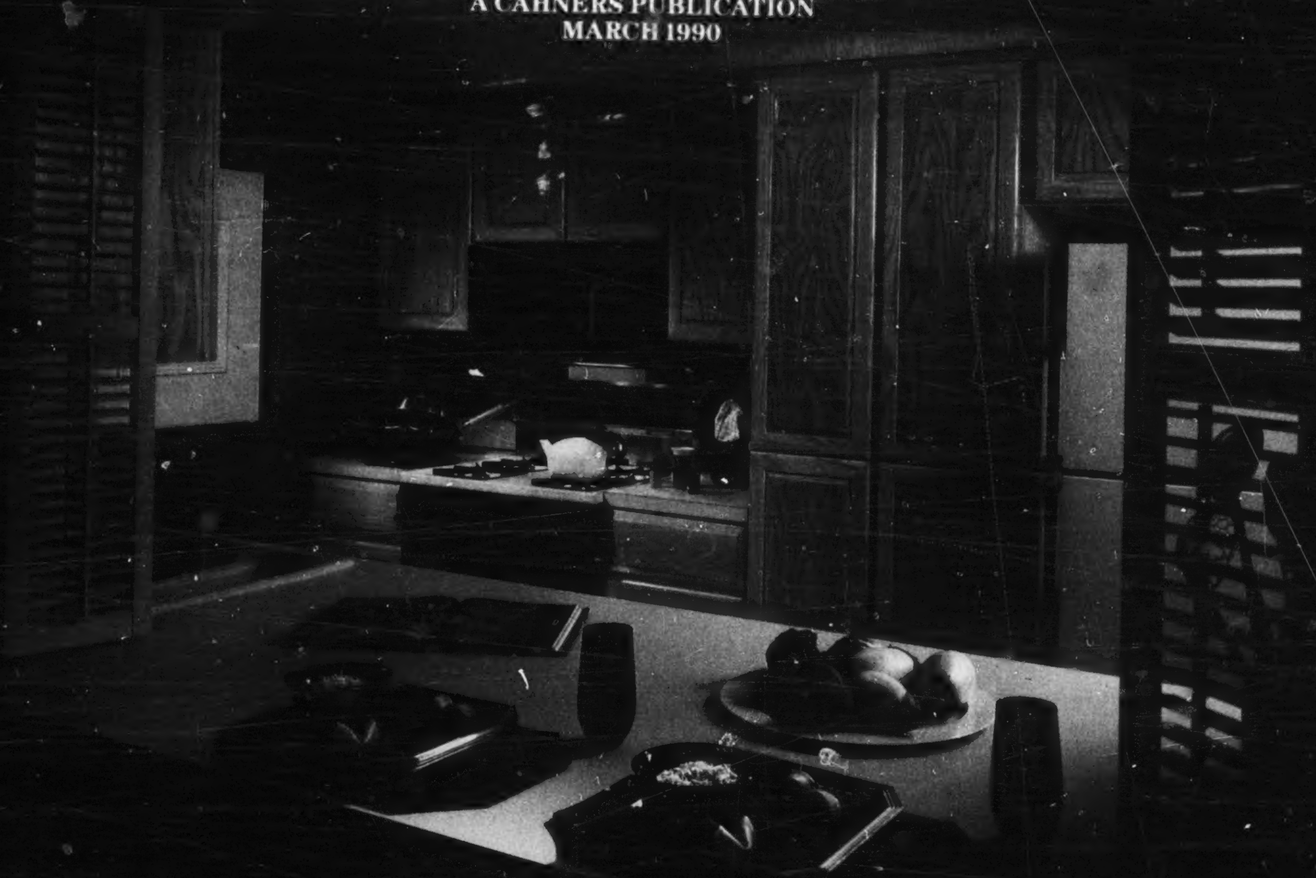


Kitchens & Baths

High & Low Road To Style

Attached Housing Hot Spots

The Giant 100—Who & Why

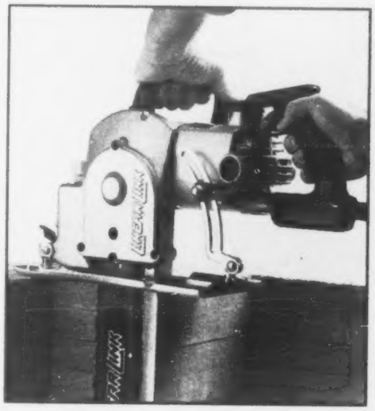
Real Estate Workouts—
Making The System Function

Professional Builder

THE MAGAZINE OF HOUSING AND LIGHT CONSTRUCTION/A CAHNERS PUBLICATION

New designs drive the factory-built market. Page 89.

Real estate workouts may lead to a pot of gold, but senior editor Bill Lurz warns builders to watch for rattlesnakes along the way. Page 22. **How disaster planning** helped builders survive last year's quakes and hurricanes. Susan Bady reports. Page 33. **Want to cut call backs?** These experts show you how. Page 45. **Model homes** are still a top sales aid. Our exclusive consumer survey explains why. Page 54. **In slow markets**, targeted ads can help revive customer interest. Page 64. **How small builders** find their niche. Page 80.



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THE MAGAZINE OF HOUSING AND LIGHT CONSTRUCTION/A CAHNERS PUBLICATION

Move-up luxury is the key to this bath, part of Bonair in Mission Viejo, Calif., which was built by Barratt Irvine. Photo by Eric Figge. Page 122.

Triad Development surveyed Puget Sound renters to ascertain what they liked, then put the best ideas to work in its popular Covington Farms. Page 132.

One hundred builders accounted for nearly a fifth of all housing starts last year in the United States. A look at who they are and what they built. Page 140.

FEATURES

Kitchens & Baths That Make The Sale 122

Nothing gets a potential customer excited about purchasing a new home like well-designed, well-merchandised wet rooms. Here are 13 delightful examples of ways builders are appealing to various customer segments, from the entry and condo level up through the high-end luxury and custom home market.

Affordable Luxury Found In Attached Projects 132

Here's a close look at three particularly interesting projects: an award-winning design is boosting demand for neoclassic townhomes in Southern California; a development built through public/private partnership in the nation's capitol mixes low-income rental units with market-rate rental, detached and townhome product; finally, a Pacific Northwest-based apartment developer quickly achieved 90 percent occupancy after surveying local renters.

The Giant 100 140

This in-depth report has two purposes: To acknowledge last year's leaders in housing starts and to preview our 24th ANNUAL REPORT OF HOUSING'S GIANTS®. For the third year in a row, Trammell Crow is the nation's leading producer.

QVA Award Winner: Weiner Homes Corp. 148

A recipe for success: Bring Texas size and California design flair at bargain prices to southern New Jersey. Builders David and Joshua Weiner departed from the region's norm in creating Woodlands at Lumbertown, but the payoff was 64 quick sales in a stagant market.

On the Cover

Chestnut Hill at Essex Park in Staten Island, N.Y., has a kitchen that is typical of many successful condominiums—it maximizes space efficiency without sacrificing style. The condos, which were built by Four Brothers at Heartland, start at $145,000. Photo by Hedrich-Blessing.

Model Home Is Top Selling Tool

Professional Builder's recent survey of builders shows model homes are used extensively—and intensively—as a top sales aid.

By William H. Lurz, Senior Editor

The model home is still king. *Professional Builder* recently conducted its 16th annual consumer/builder survey. About half of the representative national sample of 324 builders—153 to be exact—said they use model homes as a sales tool. And those disciples have enough faith to invest big money to make their models work.

Nearly 75 percent furnish their models, and the median cost for that merchandising is $26,300.

For builders of attached housing, the numbers are even more startling. More than 91 percent reported using furnished models, and the median investment in merchandising was $32,600.

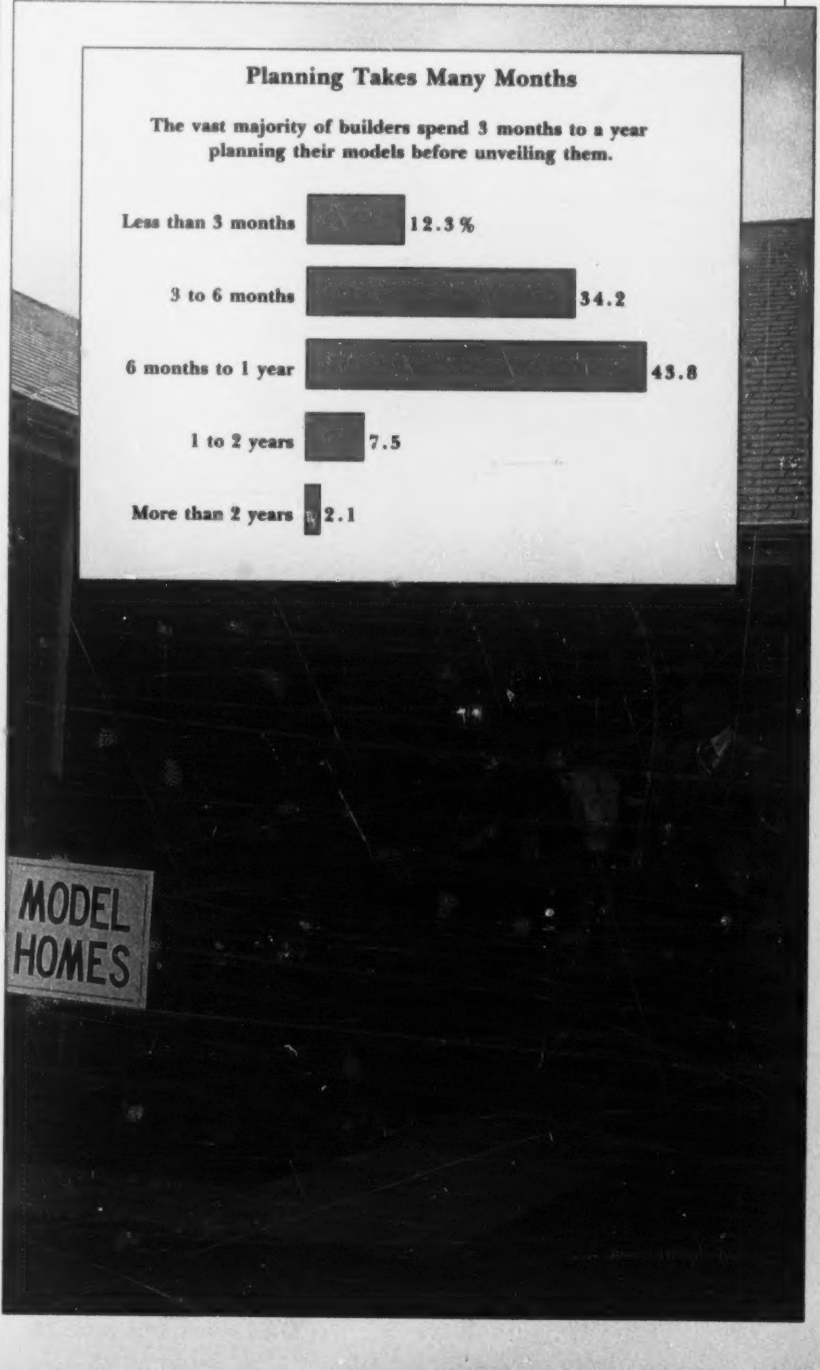
Those levels of expenditure indicate not only that model homes work, but that many builders believe they are essential.

Richard Van Schaardenburg, president of suburban Chicago's Town & Country Homes (1989 volume, $68.5 million), is one. In fact, he refuses to ever pre-sell houses before opening models.

"Without merchandised models, you can't get people emotionally involved with the product," said Van Schaardenburg. "They will never, *never* pay you the right price for what you're delivering."

The majority of builders surveyed said they locate their sales center inside one of the models (55.6 percent) or in the garage of one (19.7 percent). But 9.2 percent reported using a specially built structure, up from 7.3 percent in the previous year's survey.

April remains the most popular month for opening model homes, with 21.5 percent of the sample reporting that they open models in mid-spring. September (16.5 percent) followed, with March (15.7 percent) a close third. □



Planning Takes Many Months

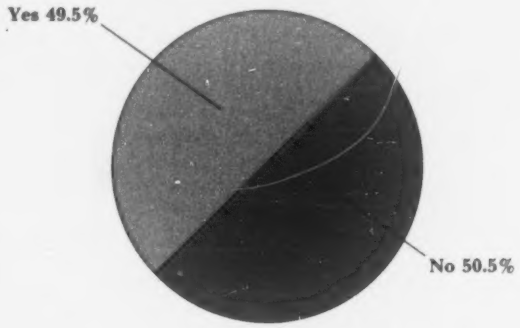
The vast majority of builders spend 3 months to a year planning their models before unveiling them.

Surveyed builders reported using their models for an average of 14.7 months per home.

Average number of models per location: 2.2

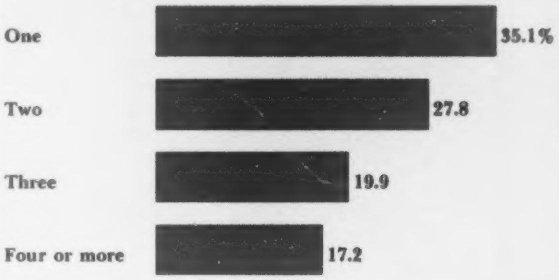
Half Of Survey Uses Models

The survey sample split almost equally between builders who use models and those that don't.



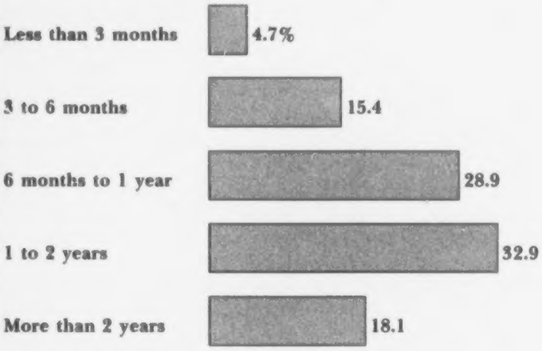
Average Models Per Location: 2.2

The majority of builders surveyed have only 1 or 2 models per sales location, but enough build more than that to bring the average up to 2.2.



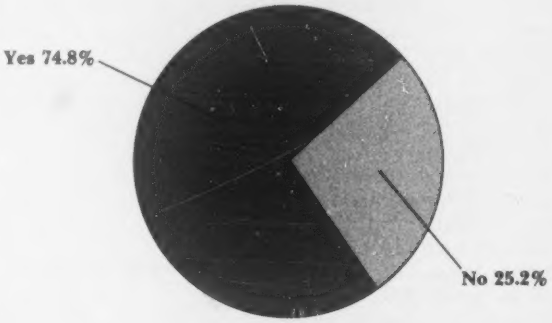
Most Use Models 6 Months To 2 Years

The highest number of builders reported using model homes an average of 1 to 2 years.



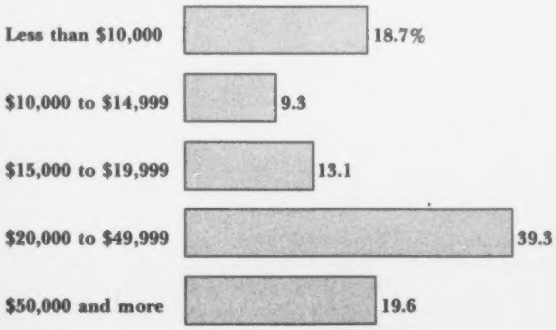
Vast Majority Furnish Models

Just under three quarters of the builders who use models said they generally furnish the interiors.



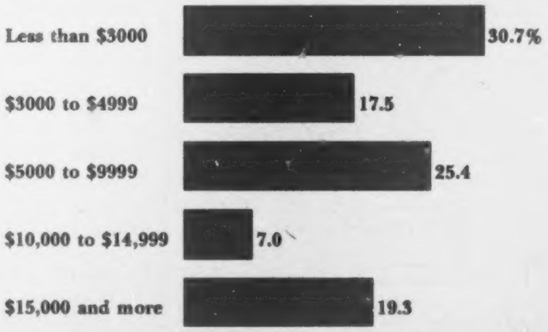
Merchandising Averages More Than $20,000

Builders spend big money to furnish models: most said they budget between $20,000 and $49,999 per house.



Landscaping Budgets Range Broadly

When asked their average cost per model home for landscaping, builder responses varied widely. The average was $5,572.



Consumer Survey Highlights Effective Ad Elements

By Kevin J. Pfeifer
Builders Advertising Journal

What are buyers looking for in a new home ad? This question was answered by participants in the 16th annual *Professional Builder* Consumer Survey, and their answers are demonstrated by the preview ad shown at right for Millpond Lakes, a lakeside condominium community in New Port Richey, Fla.

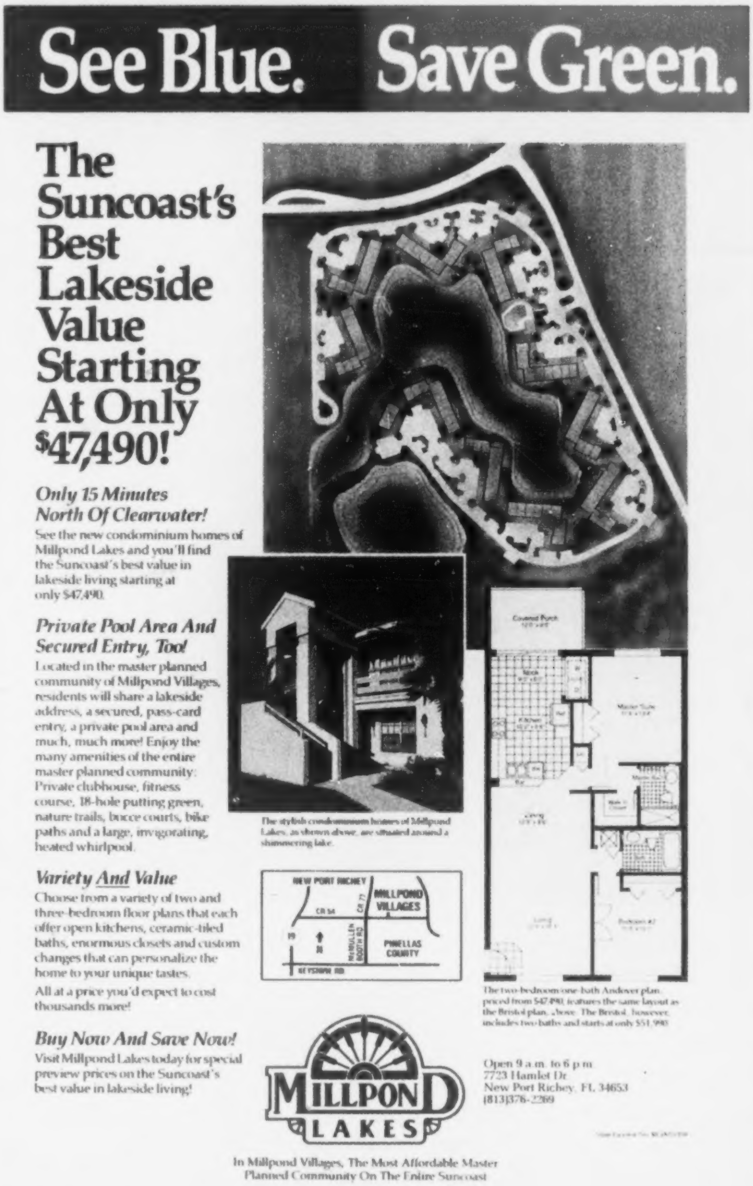
Specifically, consumers were given a list of components or elements from advertisements and asked to identify the five elements they deemed most helpful or most important in assisting their search for a new home. The top five answers are listed in the sidebar and are demonstrated in the four-color ad. Let's look at these elements in more detail.

First, at 96.8 percent, is the price of the home, listed as the most important element of all. Most people start with a fair estimate of how much house they can afford, and don't waste too much time reading about a product that is out of their reach.

The Millpond Lakes ad not only states the price clearly in the headline, it also implies value and savings through the "See Blue, Save Green" four-color banner.

Next up in the ranking is the floor plan, at a surprising 89.6 percent. Most builders don't use a

Continued on page 74



See Blue. Save Green.

The Suncoast's Best Lakeside Value Starting At Only $47,490!

Only 15 Minutes North Of Clearwater!

See the new condominium homes of Millpond Lakes and you'll find the Suncoast's best value in lakeside living starting at only $47,490.

Private Pool Area And Secured Entry, Too!

Located in the master planned community of Millpond Villages, residents will share a lakeside address, a secured, pass-card entry, a private pool area and much, much more! Enjoy the many amenities of the entire master planned community: Private clubhouse, fitness course, 18-hole putting green, nature trails, bocce courts, bike paths and a large, invigorating, heated whirlpool.

Variety And Value

Choose from a variety of two and three-bedroom floor plans that each offer open kitchens, ceramic-tiled baths, enormous closets and custom changes that can personalize the home to your unique tastes.

All at a price you'd expect to cost thousands more!

Buy Now And Save Now!

Visit Millpond Lakes today for special preview prices on the Suncoast's best value in lakeside living!

The stylish condominium homes of Millpond Lakes, as shown above, are situated around a shimmering lake.

The two-bedroom/one-bath Andover plan priced from $47,490, features the same layout as the Bristol plan, above. The Bristol, however, includes two baths and starts at only $51,990.

Open 9 a.m. to 6 p.m.
7723 Hamlet Dr.
New Port Richey, FL 34653
(813)376-2269

In Millpond Villages, The Most Affordable Master Planned Community On The Entire Suncoast

This Millpond Lakes ad hits the most important consumer hot buttons by clearly presenting the product's price, an easy-to-read floor plan and a project photo.

Continued from page 70

floor plan, but consumers are telling us we should probably use them more often.

The third ranking element is a photo of the house, at 79.9 percent. It's important to note that a photograph scored more than twice as well as a rendering, yet most builders insist on renderings.

One obvious justification for using a rendering would, in fact, be a preview ad, since no product exists to be photographed. In the Millpond Lakes ad we were able to use a photo of an existing product at a different location.

Next up is a description of the model, which is simply another way of saying copy. This element scored an impressive 72.9 percent.

Finally, the fifth ranking element is a map with location and directions, at 60 percent. I believe this element is much more important than the survey results indicate. In the Millpond Lakes ad we show a map and an address—normally it is a good idea to add written map directions as well.

The Millpond Lakes ad first ran in October 1989 and helped to double traffic from 133 in September to 266 in October. More important, the two sales in September rose to five in October and seven in November.

What Are The Elements In A Real Estate Ad Of Most Importance To You?

1. Price of house	96.8%
2. Floor plan	89.6%
3. Photo of house	79.9%
4. Description of model	72.9%
5. Map with directions	60.0%

This ad, produced by Eckel Advertising for the Premiere Group, together with the survey results, demonstrates an important principle in real estate advertising. To wit: Real estate buyers are primarily active; they have already decided to get into the home buying market before they look at an ad and therefore, they come to the real estate section or magazine with a list of requirements for their new home.

This is a logical process, as opposed to the emotional process that takes place inside the model home. If you know your target market's list, and use these five elements to logically build that list into your ad, chances are your results will be improved. ☐

Recycled Garage Keeps Children Out Of Traffic

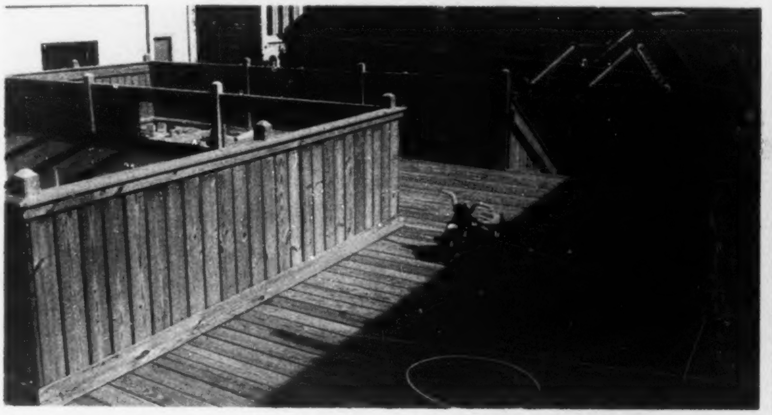
Meridian Bank of Reading, Pa., wanted a day-care center for its employees' children. It had to be centrally located with convenient access and in a stable neighborhood.

The bank found a vacant 5600-square-foot structure in the city's Callowhill Historic District. The Heritage Investment Group Ltd., with its HIG Construction arm, was hired for the recycling project. The building, which had been used as an auto repair garage, was on the National Register Of Historic Places, but was fire-damaged.

Carol Clouse, at that time the firm's in-house architect (now partner in 13th Floor Architects), designed the 3500-square-foot child-care facility.

The interior of the structure was redone, including two rental apartments in the building that were damaged in the 1979 fire.

Children's activity areas were painted bright, primary colors. The cathedral ceiling was done in white. A stairway to the structure's mezzanine was built with a sliding board for the children.



Rooftop play area is a solution for the problem of where to have children play in a downtown location.

The building's central open space was left intact to take advantage of an existing skylight. A mezzanine, built over the kitchen and storage room, helped provide the open square footage needed (40 square feet per child) to meet state requirements. The facility can handle 73 infants and preschool children.

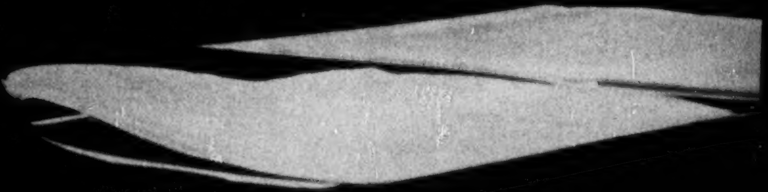
The problem of having an outside play area in a downtown location was solved on the roof.

A steel superstructure was built inside the existing structure to support a roof deck that includes a sliding board, sand box, water sprinkler and jungle gym. To protect the children, the play area is surrounded by a 3½-foot-high wood fence and a 9-foot-high vinyl-coated, chain-link fence.

Construction cost, including the rooftop play area and steel superstructure, was $171,000. ☐

1990 Housing Starts Leaders

THE GIANT 100



The Giant 100, Professional Builder, 1990

For the third year in a row Trammell Crow Residential Cos. is the nation's leading producer of housing starts.

Professional Builder's 3rd Annual Housing Starts Leaders report, the Giant 100, indicates that the Dallas-based company started 11,491 rental housing units in 1989. Another Dallas-based firm, Centex Corp., started the most single-family detached houses, with a total of 7541. The leading builder of attached housing in this report is Hovnanian Enterprises Inc., Red Bank, N.J., with a total of 2774.

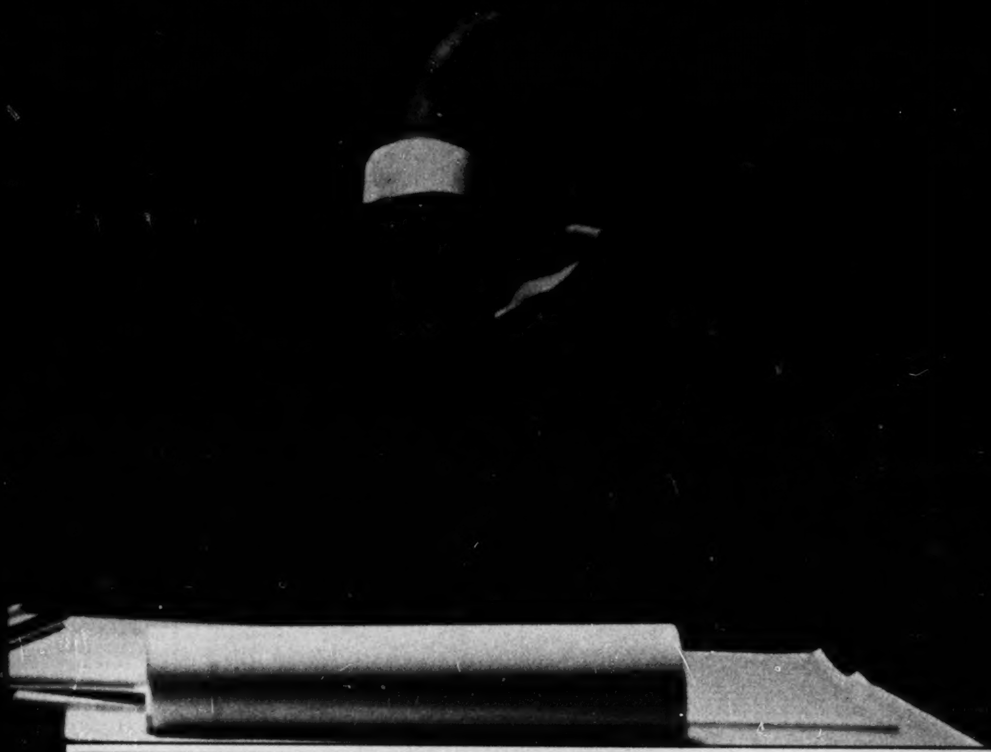
This report has two purposes: To acknowledge last year's leaders in housing starts and provide a preview of *Professional Builder*'s 23rd ANNUAL REPORT OF HOUSING'S GIANTS® to be published in July. (That report will rank the nation's 400 largest builders based on revenues from housing sold, not started.)

In compiling this report, PB surveyed more than 2000 large-volume builders in December and January. They were asked how many units they started or expected to start in 1989 in three categories—detached for-sale housing, attached for-sale housing and rental apartments. Unlike *Professional Builder*'s ANNUAL REPORT OF HOUSING'S GIANTS®, this report does not include mobile home production.

In some cases, builders were not able to provide starts information and reported sales instead. Or they provided starts estimates because they had not finished year-end reports. Those instances are noted.

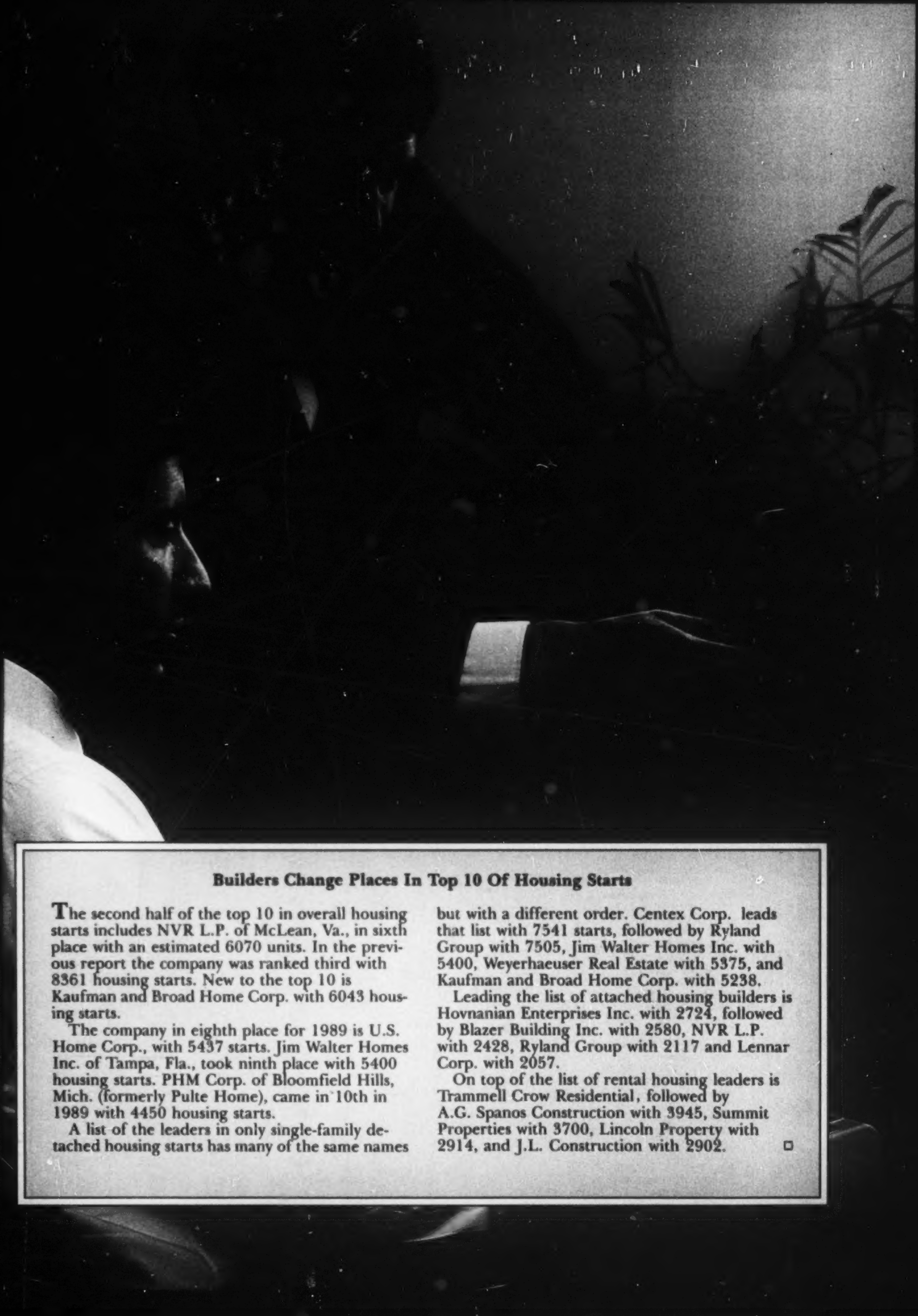
With 9622 total starts, Ryland was the No. 2 builder, as far as overall starts. Moving into the third slot in this latest report is Centex Corp. with 7989 total units.

Moving up to the fourth spot in 1989 is the William Lyon Cos. of Newport Beach, Calif., with 6490 starts. Weyerhaeuser Real Estate Co. of Tacoma, Wash., also advanced to the fifth spot in 1989 with 6270 starts. □



Rank by starts	Company, location, principal officer	For-sale, detached units	For-sale, attached units	Rental units	Total 1989 Starts
1	**Trammell Crow Residential** 3500 Trammell Crow Center Dallas, Texas 75201 Ronald Terwilliger	293	259	10,939	11,491
2	**Ryland Group** 10211 Wincopin Circle Columbia, Md. 21044 C.E. "Ted" Peck	7505	2117	0	9622
3	**Centex Corp.** 3333 Lee Parkway, PO Box 19000 Dallas, Texas 75219 Laurence E. Hirsch	7541	448	0	7989
4	**William Lyon Cos.** 4490 Von Karman Newport Beach, Calif. 92658 William Lyon	4427	985	1078	6490
5	**Weyerhaeuser Real Estate** Building QB-6 Tacoma, Wash. 98477 Steve Lewis	5375	655	240	6270
6	**HVR** 7601 Lewinsville Rd. McLean, Va. 22102 Dwight Schar	3642 est.	2428 est.	0	6070 est.
7	**Kaufman and Broad Home Corp.** 11601 Wilshire Blvd. Los Angeles, Calif. 90025 Bruce Karatz	5238	805	0	6043
8	**U.S. Home Corp.** PO Box 2863 Houston, Texas 77252 Robert Strudler	3857	1580	0	5437
9	**Jim Walter Homes Inc.** 1500 N. Dale Mabry Hwy. Tampa, Fla. 33607 Robert W. Michael	5400	0	0	5400
10	**PHM Corp.** 33 Bloomfield Hills Pkwy. Bloomfield Hills, Mich. 48013 John Vanden Esschert **(Fiscal Year Sales 9/30/89)**	4450	0	0	4450

Rank by starts	Company, location, principal officer		For-sale, detached units	For-sale, attached units	Rental units	Total 1989 Starts
11	**Lewis Homes Group of Cos.** PO Box 670 Upland, Calif. 91785 Ralph M. and Goldy S. Lewis		2788	339	928	4055
12	**A.G. Spanos Construction** 1341 W. Robinhood Dr. Stockton, Calif. 95207 Alex Spanos		0	0	3945	3945
13	**Lennar Corp.** 700 NW 107th Ave. Miami, Fla. 33172 Leonard Miller	**(Fiscal Year 11/30/89)**	1773	2057	0	3830
14	**Summit Properties** 212 S. Tyron St., #800 Charlotte, N.C. 28281 William F. Paulsen		0	0	3700	3700
15	**National Enterprises Inc.** PO Box 7680 Lafayette, Ind. 47903 David Price		1367	1385	559	3311
16	**J.L. Construction** PO Box 369 Carlsbad, Calif. 92008 Jim Franklin		109	0	2902	3011
17	**Wausau Homes Inc.** PO Box 8005 Wausau, Wis. 54402 Marvin C. Schuette		2210	800	0	3010
18	**Hovnanian Enterprises Inc.** 10 Hwy. 35 Red Bank, N.J. 07701 Kevork Hovnanian		232	2724	0	2956
19	**Hunt Building Corp.** PO Box 9368 El Paso, Texas 79984 William Sander		115	1390	1428	2933
20	**Lincoln Property Co.** 500 N. Akard Dallas, Texas 75201 Mack Pogue		0	0	2914	2914
21	**General Homes** PO Box 37148 Houston, Texas 77237 James Olafson		2827	0	0	2827
22	**Lokey Properties** 1800 Bering Dr., #220 Houston, Texas 77057 Kenneth R. Lokey		324	0	2362	2686
23	**The Lusk Co.** 17550 Gillette Ave. Irvine, Calif. 92713 John D. Lusk		1840	342	475	2657
24	**Blazer Building Inc.** 1375 Bunker Hill Houston, Texas 77055 Chris Richardson		0	2580	0	2580
25	**The Anden Group** 15260 Ventura Blvd. Sherman Oaks, Calif. 91403 Eugene S. Rosenfeld		1360	1180	0	2540
26	**Edward Rose Building Enterprise** 2399 W. Ten Mile Rd. Southfield, Mich. 48037 Sheldon Rose		91	0	2400	2491
26	**UDC-Universal Development Co.** 4812 S. Mill Ave. Tempe, Ariz. 85282 Gary Rosenberg		1913	578	0	2491
28	**Watt Industries Inc.** 2716 Ocean Park Blvd. Santa Monica, Calif. 90406 Raymond Watt		2224	220	0	2444
29	**MDC Holdings Inc.** 3600 S. Yosemite St. Denver, Colo. Larry Mizel		1970	470	0	2420
30	**Presley Cos.** PO Box 19672 Irvine, Calif. 92713		2017	360	0	2377
31	**Picerne Properties** 74 Lambert Lind Hwy. Warwick, R.I. 02886 Ronald Picerne		46	0	2321	2367
32	**Harkins Group** 12301 Old Columbia Pike Silver Spring, Md. 20904 Thomas P. Harkins		0	475	1874	2349



Builders Change Places In Top 10 Of Housing Starts

The second half of the top 10 in overall housing starts includes NVR L.P. of McLean, Va., in sixth place with an estimated 6070 units. In the previous report the company was ranked third with 8361 housing starts. New to the top 10 is Kaufman and Broad Home Corp. with 6043 housing starts.

The company in eighth place for 1989 is U.S. Home Corp., with 5437 starts. Jim Walter Homes Inc. of Tampa, Fla., took ninth place with 5400 housing starts. PHM Corp. of Bloomfield Hills, Mich. (formerly Pulte Home), came in 10th in 1989 with 4450 housing starts.

A list of the leaders in only single-family detached housing starts has many of the same names but with a different order. Centex Corp. leads that list with 7541 starts, followed by Ryland Group with 7505, Jim Walter Homes Inc. with 5400, Weyerhaeuser Real Estate with 5375, and Kaufman and Broad Home Corp. with 5238.

Leading the list of attached housing builders is Hovnanian Enterprises Inc. with 2724, followed by Blazer Building Inc. with 2580, NVR L.P. with 2428, Ryland Group with 2117 and Lennar Corp. with 2057.

On top of the list of rental housing leaders is Trammell Crow Residential, followed by A.G. Spanos Construction with 3945, Summit Properties with 3700, Lincoln Property with 2914, and J.L. Construction with 2902. □

Rank by starts	Company, location, principal officer	For-sale, detached units	For-sale, attached units	Rental units	Total 1989 Starts
33	**MI/Schottenstein Homes Inc.** 41 S. High St. Columbus, Ohio 43215 Irving Schottenstein	2060	0	0	2060
34	**The Mueller Group** 19550 Pacific Hwy. South Seattle, Wash. 98188 Henry J. Mueller	0	2046	0	2046
35	**Ritz-Craft Corp. of Pennsylvania** PO Box 70 Mifflinburg, Pa. 17844 Paul R. John	1850	175	0	2025
36	**Robertson Homes** 6653 Embarcadero Stockton, Calif. 95209 Barton R. Robertson	0	0	2020	2020
37	**J. L. Mason Group Inc.** 5020 Tamiami Trail North Naples, Fla. 33940 Joe L. Mason	1174	441	367	1982
38	**Paragon Group Inc.** 7557 Rambler Rd., #1200 Dallas, Texas 75231 William Cooper	499	0	1481	1980
39	**North American Housing** PO Box 145 Point of Rocks, Md. 21777 Carl Benna	1506	376	0	1882
40	**Dominion Developments Inc.** 5911 Orchard St. W. Tacoma, Wash. 98467 J. David Page	0	1808	0	1808
41	**Shea Homes** 655 Brea Canyon Rd. Walnut, Calif. 91789 Roy Humphreys	1076	239	424	1739
42	**Robert Randall Co.** 9500 S.W. Barbur Blvd., #300 Portland, Ore. 97219 Robert D. Randall	0	0	1700	1700
43	**Tompkins Heritage Homes** 1637 E. Vine St. Kissimmee, Fla. 32743 Tom Tompkins	1048	84	564	1696
44	**Woodcrest Development Inc.** 17911 Mitchell Ave. Irvine, Calif. 92714 Ronald J. Gilles	1050	180	450	1680
45	**Forecast Mortgage Corp.** 10670 Civic Center Dr. Rancho Cucamonga, Calif. 91730 James Previti	1331	0	296	1627
46	**General Development Corp.** 1111 S. Bayshore Dr. Miami, Fla. 33131 Robert Ehrling	1495	70	0	1565
47	**Colson & Colson Construction Co.** 2741 12th St. SE Salem, Ore. 97302 William E. Colson	0	0	1540	1540
48	**Calmark Properties** 11111 Santa Monica Blvd. Los Angeles, Calif. 90025 Uri Sheinbaum	350	244	926	1520
49	**GlenFed Development Corp.** 16601 Ventura Blvd., #. 500 Encino, Calif. 91436 Terry Hess	1201	310	0	1511
50	**Standard Pacific** 1565 W. MacArthur Costa Mesa, Calif. Ronald Foell	1443	0	0	1443
51	**Weekley Homes Inc.** 1300 Post Oak Blvd. Houston, Texas 77056 David M. Weekley	1378	0	0	1378
52	**Warmington Homes** 3090 Pullman Costa Mesa, Calif 92626 James Warmington	1250	115	0	1365
53	**Continental Homes Holding Co.** PO Box 60010 Phoenix, Ariz. 85082 Kathleen Wade, Donald Loback	1280	80	0	1360
54	**Amrep Corp.** 10 Columbus Circle New York, N.Y. 10019 Howard W. Friedman	735	60	548	1343
55	**DiVosta & Co.** 10358 Riverside Dr. Palm Beach Gardens, Fla. 33410 Otto B. DiVosta	756	571	0	1327

Rank by starts	Company, location, principal officer	For-sale, detached units	For-sale, attached units	Rental units	Total 1989 Starts
56	**Lexington Development Corp.** 1156 W. Shure Dr. Arlington Heights, Ill. 60004 Ronald J. Benach	717	601	0	1318
57	**Lockwood Group** 17 W. Lockwood Ave. St. Louis, Mo. 63119 Joseph A. Shepard	0	0	1304	1304
58	**Citation Builders** 17731 Irvine Blvd., #201 Tustin, Calif. 92680	1300	0	0	1300
58	**Fieldstone Co.** 14 Corporate Plaza Newport Beach, Calif. 92660 Peter Ochs	1300	0	0	1300
60	**Griffin Homes** PO Box 9810 Calabasas, Calif. 91302 Paul Griffin Jr.	1071	226	0	1297
61	**Embrey Investments** 750 East Mulberry, #. 400 San Antonio, Texas 78212 Robert Hunt	0	0	1282	1282
62	**Shelter Canadian Holdings Ltd.** 7 Evergreen Place, [3]2600 Winnipeg, Manito, Canada R312T3 Arni C. Thorsteinson	0	70	1210	1280
63	**Worthing Cos.** 5949 Sherry Lane Dallas, Texas 75225 Robert K. Utley III	0	0	1260	1260
64	**Ahmanson Developments Inc.** 1123 S. Parkview Dr., #360 Covina, Calif. 91724 Jeffrey A. Slavin	1165	83	0	1248
65	**First City Properties Inc.** 8383 Willshire Blvd., #800 Beverly Hills, Calif. 90211	367	24	847	1238
66	**Barnett-Range Corp.** PO Box 8189 Stockton, Calif. 95208 Hal Barnett, James Range	320	916	0	1236
67	**Calibre Co. of Georgia Inc.** 2100 River Edge Parkway Atlanta, Ga. 30328 Larry Bennett	0	1200	0	1200
68	**Holly Corp.** PO Box 99953 Tacoma, Wash. 98499 Dan Kelley	0	0	1194	1194
69	**J.M. Peters Co.** 3501 Jamboree, #200 Newport Beach, Calif. 92660 James M. Peters	1024	156	0	1180
70	**McKellar Development of La Jolla** 1250 Prospect #103 La Jolla, Calif. 92037 Christopher S. McKellar	0	1177	0	1177
71	**Drees Co.** 211 Grandview Dr., #300 Covington, Ky. 41017 Ralph A. Drees	737	189	250	1176
72	**Barratt American Inc.** 30 Fairbanks, #110 Irvine, Calif. 92718 Mark L. Frazier	761	409	0	1170
73	**Lockridge & Assoc. Inc.** 1355 W. Brierbrook Rd. Germantown, Tenn. 38138 Robert W. Lockridge	0	865	298	1163
74	**Bramalea California Inc.** 1 Park Plaza, #1100 Irvine, Calif. 92714 Peter B. Perrin	1141	0	0	1141
75	**Boston Capital Partners Inc.** 313 Congress St. Boston, Mass. 02210 Richard J. DeAgalo	0	0	1140	1140
76	**Calton Inc.** 500 Craig Rd. Freehold, N.J. 07728 Anthony J. Caldarone	1100 est.	0	0	1100 est.
77	**Flournoy Construction** PO Box 6566 Columbus, Ga. 31995 John F. Flournoy	2	0	1094	1096
78	**The Artery Organization** 7200 Wisconsin Ave. Bethesda, Md. 20814 Alan Geller	195	495	505	1095

Rank by starts	Company, location, principal officer	For-sale, detached units	For-sale, attached units	Rental units	Total 1989 Starts
79	**Beazer Properties Inc.** 945 E. Paces Ferry Rd. Atlanta, Ga. 30326 Jerald Cohn	1091	0	0	1091
80	**Contempri Homes** Stauffer Industrial Park Taylor, Pa. 18447 Victor DePhillips	847	201	0	1048
81	**Naticoke Homes Inc.** PO Box F Greenwood, Del. 19950 John Mervine Sr. **(Fiscal Year ending 10/30/89)**	968	72	0	1040
81	**International American Homes** 100 Walnut Ave. Clark, N.J. 07066 Robert H. Winnerman	550	490	0	1040
83	**Valencia Co.** 23823 Valencia Blvd. Valencia, Calif. 91355 Tom Lee	350	472	216	1038
84	**Homestead Land Development** 1777 Murchison Dr. Burlingame, Calif. 94010 Britt Evans	1020	0	0	1020
85	**Prometheus Development Co.** 2600 Campus Dr., #200 San Mateo, Calif. 94403 Sanford Diller	0	0	1014	1014
85	**Holtzman & Silverman Construction Co.** 30833 Northwestern Hwy, #300 Farmington Hills, Mich. 48018 J. Holtzman & B. Silverman	44	110	860	1014
87	**The Marriott Corp.** Marriott Dr. Washington, D.C. 20058 J.W. Marriott Jr.	0	0	1000	1000
88	**Zaremba Development Co.** 14600 Detriot Rd. Lakewood, Ohio 44107 Alan F. Scott	0	0	968	968
89	**Taylor Morley Simon Inc.** 1227 Fernridge Pkwy, #200 St. Louis, Mo. 63141 Harry T. Morley	257	156	326	939
90	**Oriole Homes Corp.** 1151 NW 24th St. Pompano Beach, Fla. 33064 Richard D. Levy	158	656	120	934
91	**Friendswood Development** PO Box 2567 Houston, Texas 77252 John Walsh	920	0	0	920
92	**A-M Homes** 125 E. Victoria St. Santa Barbara, Calif. 93101 Michael F. Muench & James B. Araujo	658	139	106	903
93	**Olympia/York** 210 Pelham Rd. New Rochelle, N.Y. 10805 Charles Gazzola	0	0	900	900
94	**Di Loreto Construction** PO Box 70280 Reno, Nev. 89570 Perry M. Di Loreto	650	0	224	874
95	**Hughes-Patwil Homes** P O Box 6181 Linglestown, Pa. 17112 Eugene Bastian	852	0	0	852
96	**Mitchell Co.** PO Box 160306 Mobile, Ala. 36616 John Saint	336	0	500	836
97	**Patt Organization** 422 Allegheny St. Holidayburgh, Pa. 16649 P. Jules Patt	110	659	60	829
98	**Dividend Development Corp.** 3600 Pruneridge Ave., #340 Santa Clara, Calif. 95051 Douglas Watson	805	0	0	805
99	**Cooley Co.** 36250 Dequindre, #200 Sterling Heights, Mich. 48310 Dale Scrace	0	0	796	796
100	**Condiotti Enterprises Inc.** PO Box 6855 Santa Rosa, Calif. 95406 A. Condiotti	730	64	0	794

One-Third Of Giant 100 Are Based In California

Thirty-three of this year's Housing Starts Leaders have headquarters in California. But the influence of that state is even more wide ranging. Many of the builders in this report also have operations in California though their headquarters are elsewhere. Altogether, 28 states plus Canada are represented in the Giant 100.

The California builder with the most housing starts is the William Lyon Cos. of Newport Beach, with 6490 total starts (4427 single-family detached units, 985 attached units and 1078 rental units).

Texas is headquarters for 13 Giants, including the builder first on the Giant 100 list, Trammell Crow Residential of Dallas, with 10,939 rental units, 293 single-family detached units and 259 attached units. Florida is home to seven Giants with the largest sunshine state builder being Jim Walter Homes of Tampa, with 5400 detached houses.

Other headquarters states are Maryland, Michigan, Pennsylvania and Washington, each with four firms. Georgia and New Jersey each have three headquarters. In the category for two headquarters each are Arizona, Missouri, Ohio, Oregon and New York.

The following states have one builder Giant each headquartered there: Alabama, Colorado, Delaware, Indiana, Illinois, Kentucky, Massachusetts, Nevada, North Carolina, Rhode Island, Tennessee, Wisconsin and Virginia.

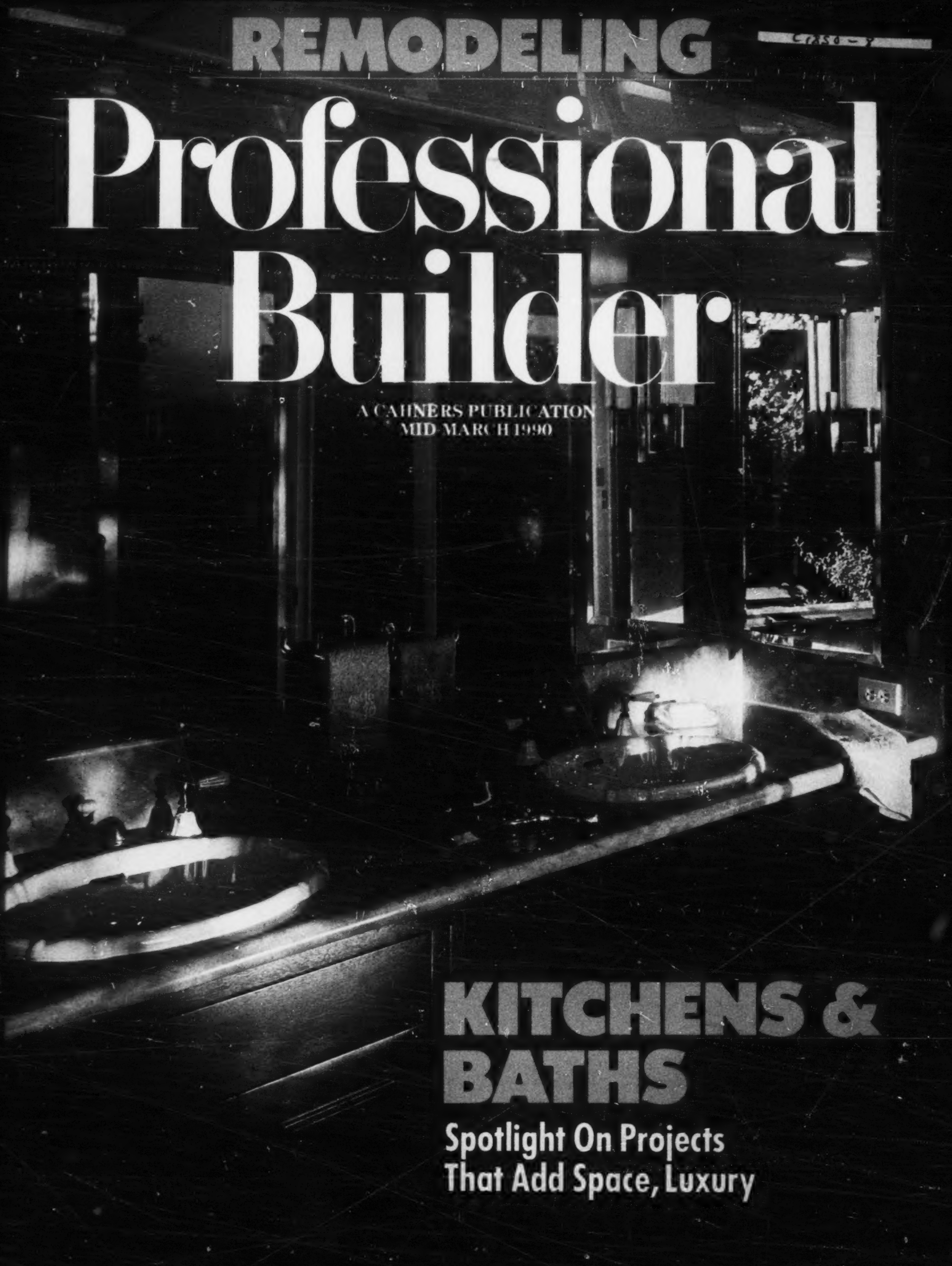
Other places with Giant 100 headquarters are Washington, D.C. and Canada. ☐

C1750 - 7

REMODELING

Professional Builder

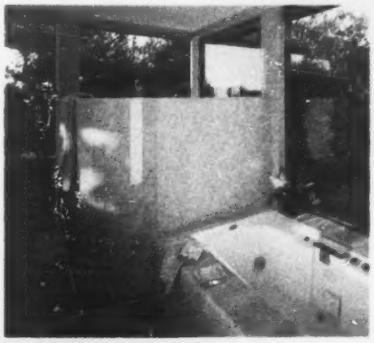
A CAHNERS PUBLICATION
MID-MARCH 1990



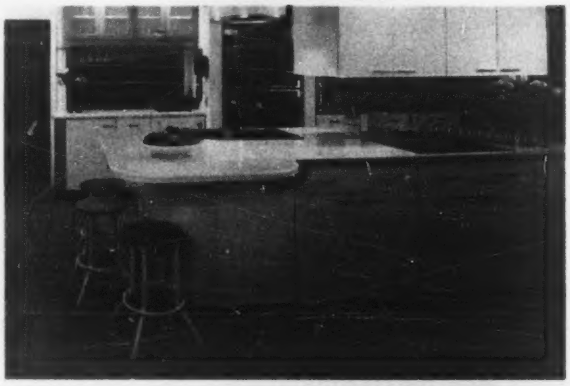
KITCHENS & BATHS

Spotlight On Projects
That Add Space, Luxury

CONTENTS



Glass in the bath, page 38.



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UPFRONT

Small Jobs Can Build Great Expectations. Page 11.
My Favorite Kitchen. Updated kitchen kept its charm. Page 14.
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Large project remodeling is a sure bet. Page 26.
A new kitchen makes entertaining an art form. Page 32.
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Remodeler installs unusual bathroom vanities. Page 60.

FEATURES

Double Headers/62

It sometimes takes drastic action to update an older home. In these projects, remodelers tackled kitchens and the baths at the same time. From revamping a kitchen in a Roaring '20s home to modernizing a California ranch, each job required a different approach.

All Spaced Out/72

A problem remodelers face is where to find the space to update tiny, dark kitchens and baths. Some creative solutions are offered by remodelers from around the country.

PRODUCTS/86

Products renew kitchens and baths.

HOUSE PLANS/99

THE MAGAZINE OF HOUSING AND LIGHT CONSTRUCTION/A CAHNERS PUBLICATION

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Outlook Bright For Large Project Remodeling

Three-year forecast calls for consumer spending on additions and alterations to grow 21.4 percent.

The next few years should be good ones for the increasing number of builders who have diversified into remodeling work. Following three years of disappointing growth in residential remodeling expenditures, we expect to see a strong rebound in 1990 and 1991. Lower interest rates and continued good growth in total household income will combine to boost upkeep and improvement expenditures by more than 18 percent between 1989 and 1991. Although spending on "fix-up/spruce-up" jobs should rise moderately during this period, the strongest growth will be in the category of "additions and alterations." Since so many of these major projects are financed out of savings or through home equity loans, the interest rate declines we expect during 1990-1991 should spur activity in remodeling jobs. Current forecasts indicate that consumer spending on residential additions and alterations should grow by 21.4 percent from 1989 through 1991.

Over the years, surveys have consistently pointed to kitchens and baths as the two most frequently undertaken residential remodeling projects. A recent NAHB survey of remodelers found that 86 percent had done some kitchen remodeling work during the survey period, and 82 percent had undertaken at least one bath.

Last year's slowdown in the rate of building material price increases is more good news for remodelers. According to a recent NAHB survey of remodelers, materials account for 37 percent of the cost of a typical residential remodeling job—slightly more than the cost of labor. Last year's increase in the inflation measure covering an aggregate of all construction materials was only 3.3 percent, down from the 5.6 percent rate recorded during 1988. A yearly increase in this composite price index is expected to average a very modest 3 percent during 1990-1991.

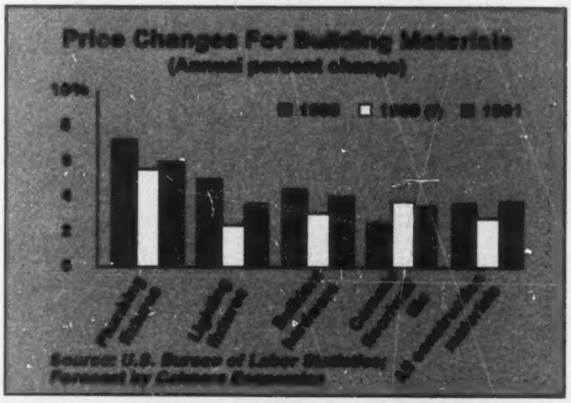
Remodeling will continue to benefit from the large volume of existing home sales that occur annually. During the last two years, single-family home starts dropped an average of 6.4 percent annually, but existing home sales held up encouragingly well. After increasing by 1.9 percent during 1988, sales of existing single-family homes fell by a modest 4.6 percent last year. An average of 3.5 million existing homes sold during each of the last few years, and should rise to nearly 3.8 million in 1991. □

By Daryl Delano, Cahners Economics, Newton, Mass.

Cost Of A Residential Remodeling Job

Labor	36%	Labor	43%
Materials	37	Materials	28
Profit	13	Profit	15
Overhead	14	Overhead	14
Major Jobs (i.e. siding, kitchen remodeling, bath remodeling, etc.)		Upkeep (i.e. painting, floor sanding, minor roof repairs, etc.)	

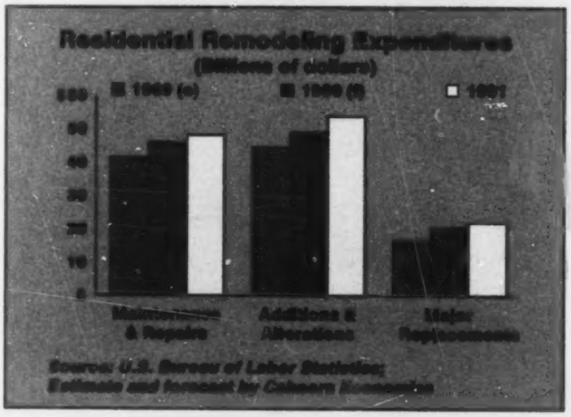
Source: National Association of Home Builders



Price Changes For Building Materials

(Annual percent change)

Source: U.S. Bureau of Labor Statistics; Forecast by Cahners Economics



Residential Remodeling Expenditures

(Billions of dollars)

Source: U.S. Bureau of Labor Statistics; Estimate and forecast by Cahners Economics

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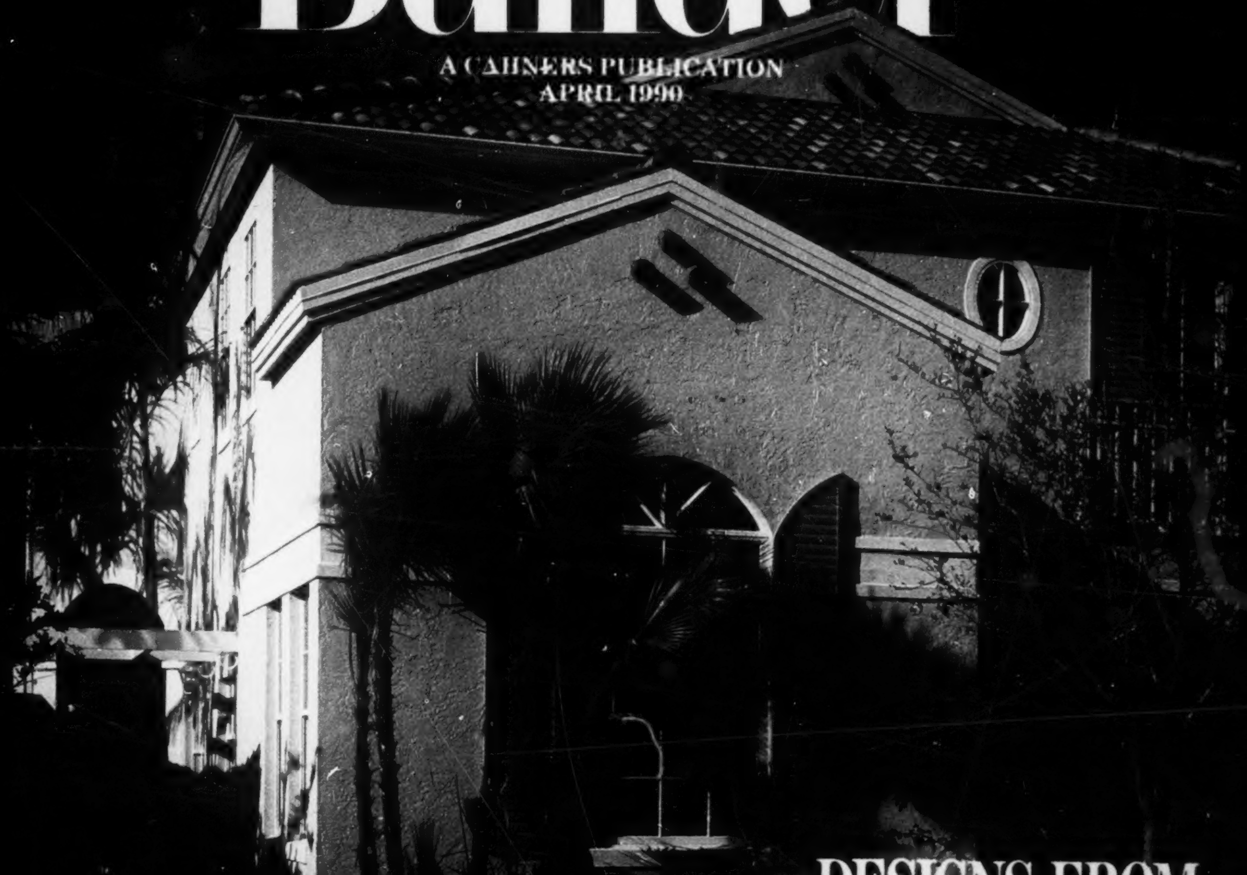

DESIGNS FROM THE SOUTH

Meeting Market Needs

Tackling The Infrastructure Crisis

Low-Income Housing

Finding New Capital After Thrift Reform

Professional Builder

APRIL • 1990 **VOL. 55**

THE MAGAZINE OF HOUSING AND LIGHT CONSTRUCTION/A CAHNERS PUBLICATION

Talk about hot-selling Southern designs: 60 percent of the homes in Jones Co.'s Carlyle collection at South Chase, Orlando, Fla., sold before opening. Page 98.

By some estimates, the bill for handling the nation's infrastructure needs over the next few decades will be in the trillions. Who will pay it? Page 112.

These detached homes at Crystal Meadows, priced from $59,000, sold out in six weeks. The project was built by Cimarron Homes of Durham, N.C. Page 120.

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Designs From The South 98

There's no market more dynamic than the New South: One region booms with service sector vigor, another reels from economic collapse. The models shown here represent a variety of designs and market strategies. But all have one thing in common—each is a best seller.

Infrastructure: Who Should Pay? 112

The financial burden of maintaining and expanding the nation's basic services—roads, schools and utilities—is shifting away from government and onto builders through impact fees and land exactions. Now that they are armed with a new strategic plan, however, builders may be ready to fight back.

How Builders Scale Obstacles To Affordable Housing 120

Home builders are stepping in—some using their own capital resources, others taking advantage of state and local subsidies—to provide low-cost housing. These case studies show the importance of cost-cutting ingenuity, planning and design innovation.

QVA Award Winner: The Bluffs Of Green Valley 124

This month's award-winning "Home of Quality, Value and Affordability" brings housing with mountain views to Las Vegas' first-time market. Builder Perry Di Loreto hit the jackpot by conquering a difficult site others thought could never be developed.

Remodeling Project Of The Month 129

The owners of this home had a tall order for their contractor: separate the bedroom wings from the main living areas; add amenities that make it easier to entertain, and take advantage of desert sunsets.

On The Cover

Channing Corp.'s Villa D'Este in Boca Raton/West Palm Beach.

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How merchandising introduces new ideas to a market. Page 82.

In the next few years, builders will increasingly turn to **alternative sources of financing** such as pension plans and foreign investors. Here's a detailed look at how they operate and what they will demand of you. Page 22. Is **S&L reform** changing the way builders operate? An exclusive survey, beginning on page 30. A primer on **managing for return** on assets. Page 43. By always anticipating change, builder **Nolan Kerschner** manages to stay profitable. Page 55. Three **market-tested plans** to make product stand out from the crowd. Page 65.

The latest in roofing colors and materials. Page 134.

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Prince Charles stirs debate that impacts builders.

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Builders Gauge Effects Of S&L Crisis

In a recent survey, 43 percent of builders said they were actively looking for new money sources to replace thrifts.

By Susan Bady, Associate Editor

The impact of the S&L crisis on home builders is unquestionably significant. In a survey conducted by KPMG Peat Marwick/Goodkin Real Estate Consulting Group, 58 percent of builder respondents said the thrift industry's problems have affected financing or joint venturing activities.

The survey was distributed in January 1990, to the top 400 builders nationwide and the top 400 non-builders (financial institutions, lenders, pension funds, investment firms, law firms and educational institutions).

Forty-one percent of non-builders said the S&L crisis and corresponding government legislation (the Financial Institutions Reform, Recovery and Enforcement Act of 1989, or FIRREA) has affected their financing or joint venturing activities. Forty-nine percent of all respondents indicated the same.

According to Sanford R. Goodkin, executive director of KPMG Peat Marwick/Goodkin Real Estate Consulting Group, it is highly significant that more than half the top builders and nearly half of the other institutions involved in real estate across the nation are facing changes in traditional lending practices. If S&L problems are affecting these large builders, then many smaller builders are likely to be devastated, Goodkin said.

Fifty-three percent of builders indicated that the S&L crisis will eventually affect their company's financing in 1990 or 1991. Of non-builders, 46 percent felt they would be affected eventually and 28 percent thought the effect would be significant. Fifty-seven percent of all respondents felt they would be affected eventually and 28 percent, significantly. The increase of respondents indicating changes in financing relationships in 1990 or 1991 suggests they feel the S&L problem will continue for the first part of the decade.

Thirty-eight percent of builder respondents had been directly involved in joint ventures with a thrift. FIRREA, which requires S&Ls to limit their real estate involvement, will have a direct impact on 24 percent of all respondents.

This creates a demand for new financing sources that will more than likely be met by foreign capital, according to Goodkin. Historically, foreign investors have limited their funding to Class A buildings in major metropolitan areas, but their money will follow opportunities. The more sophisticated lending practices applied to commercial lending will be required by home builders, he said.

The survey indicates that builders are already out searching for new money sources. Sixty-two percent are actively looking or thinking about replacement contacts for the thrifts they currently do business with. Of all respondents, 44 percent are actively looking for or thinking about replacements.

The Goodkin survey also solicited opinions about future economic conditions affecting real estate. Sixty-one percent of builders and 57 percent of all respondents feel that housing starts in 1990 will

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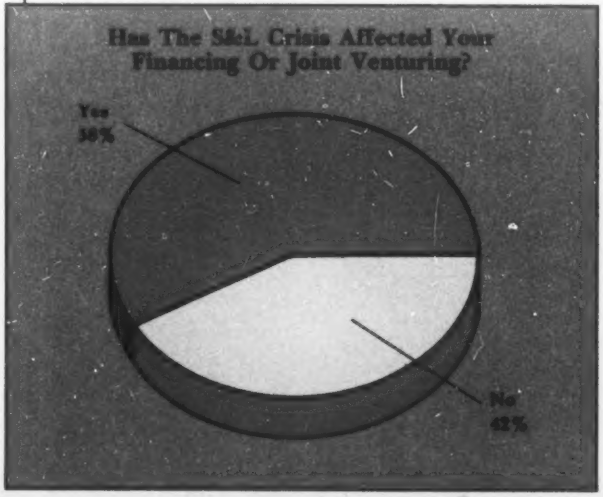
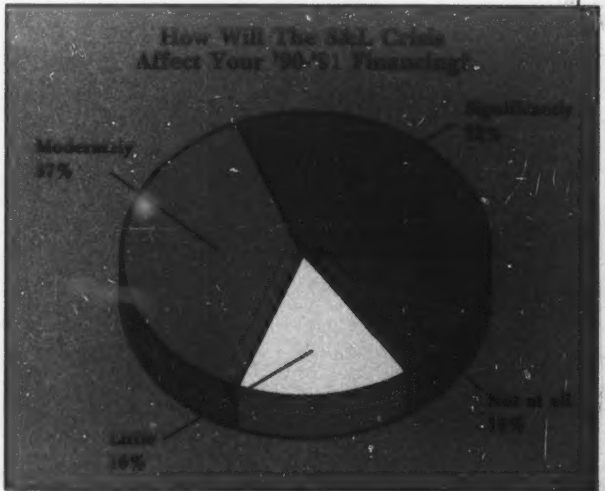




Builders

B

Effects of the S&L crisis on builders

Continued from page 30

be the same or higher compared to 1989. Fifty percent of builders feel their local housing markets will be weaker in 1990 compared to 1989, as do 57 percent of non-builders and 55 percent of all respondents.

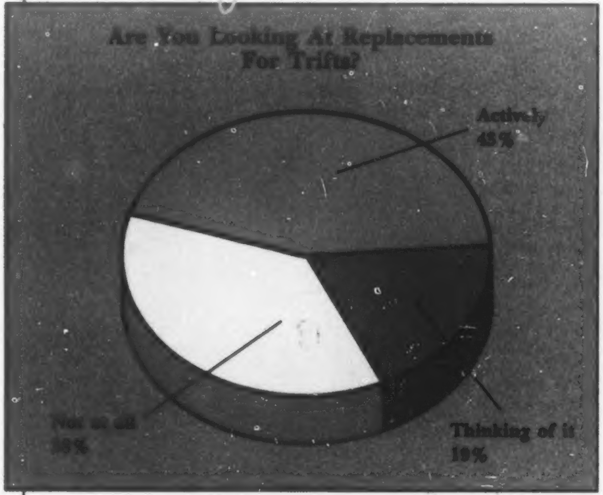
Only 17 percent of builders feel there will be a nationwide recession in 1990, compared to 23 percent of non-builders and 20 percent of all respondents. Goodkin said this is on target with Federal Reserve chairman Alan Greenspan's projection that there is a 20 percent chance the economy will fall into a recession in 1990. In other words, economic expansion may last one more year.

From a national economic perspective, 43 percent of builders believe that economic growth in 1990 will be the same as the economic growth of 1989. Forty-four percent of non-builders and 43 percent of all respondents agree. Fears of a recession appear to have subsided from the early months of 1989, concluded Goodkin.

A small number (5 percent) of builders believe there will be a deep recession because of reductions in federal military expenditures.

Only 17 percent of builders and 16 percent of non-builders indicated that proposed or actual military cuts will make changes in strategic planning for 1990 or 1991. Seventeen percent of all respondents do not feel military cuts will be drastic enough to reduce the local real estate markets in the near term. According to Goodkin, this indicates that some of the top business leaders in the country have faith that Congress will not throw the economy into a tailspin by drastically reducing military expenditures.

Thirty-four percent of builders and 47 percent of non-builders feel military cuts will create problems in their local markets. It may be assumed that the 41 percent who feel military cuts will create problems in their local markets must believe the disruptions will be minor, Goodkin said. ☐



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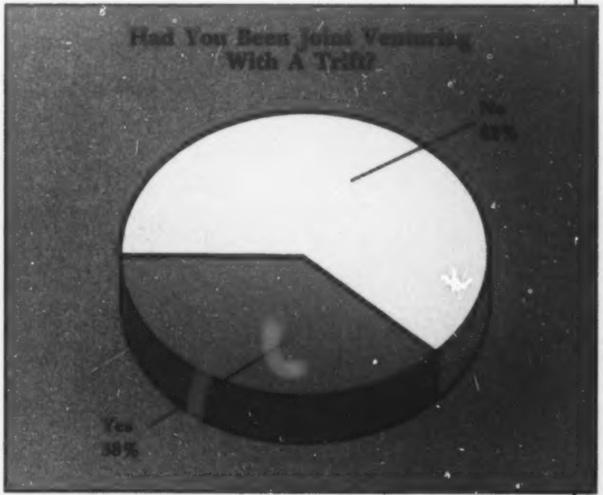

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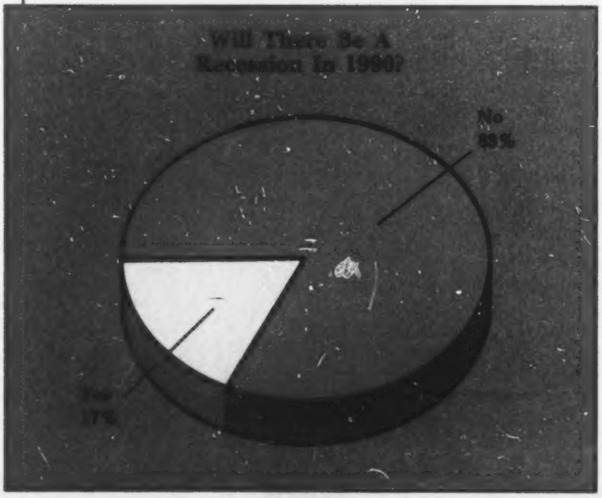

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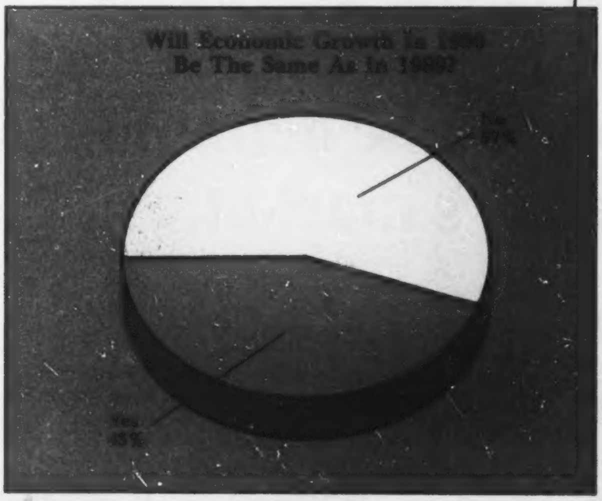

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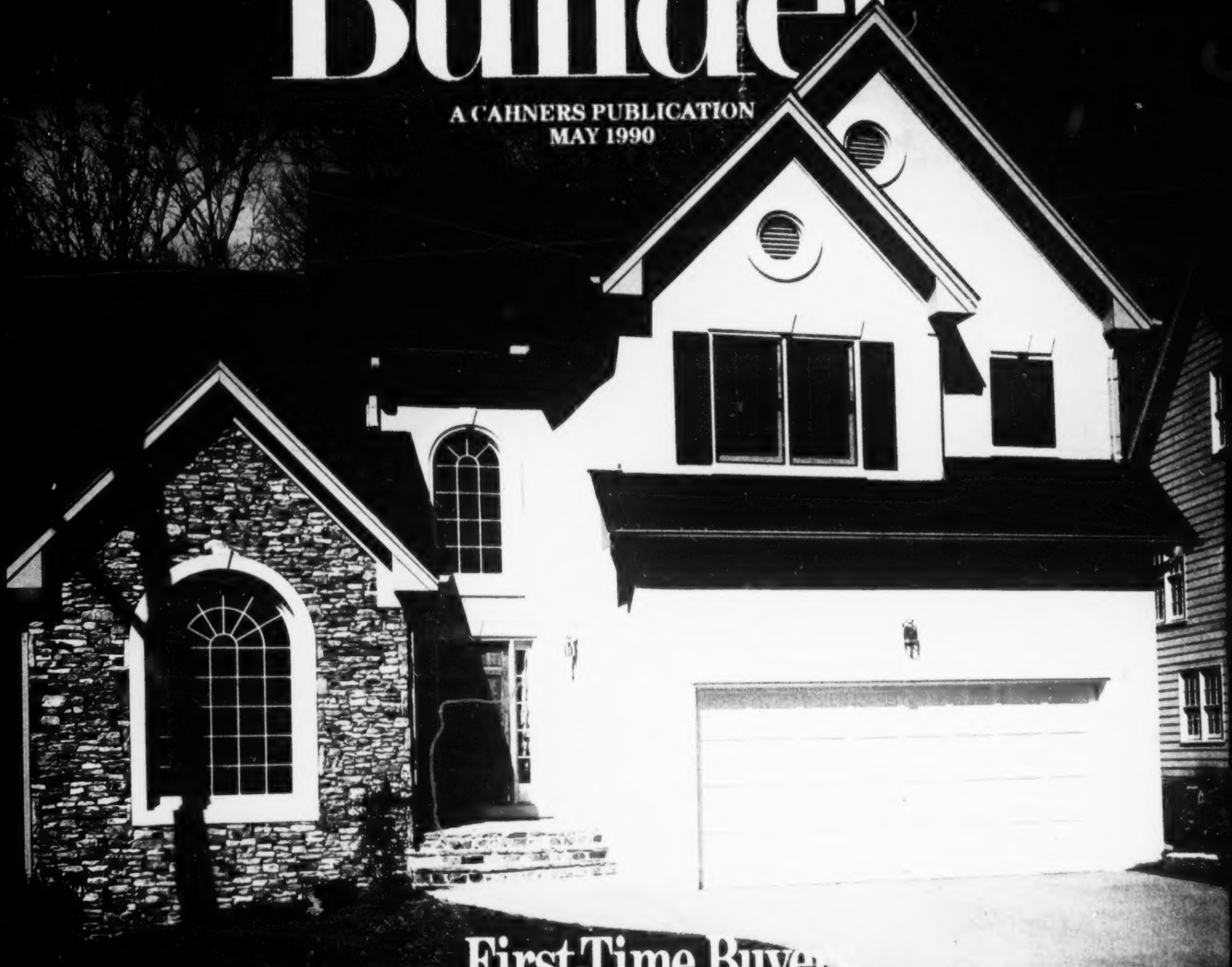

First-Time Buyers

Bridging The Affordability Gap

Why Japanese Investment Is Booming

Making Homes Safer For Children

Nineteen New House Plans Available

Professional Builder

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Smart land acquisition kept Torringford Farms low priced, making it a major success for Service Associates, Torrington, Conn. Page 106.

The ad campaign for Weston Lakes, Houston, took top honors in three Target Awards categories. More winners, beginning on Page 116.

A California site, quality, and affordability? Plan 3 of R&H Homes' Country Gardens has 1855 square feet of value for just $170,000. Page 132.

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Bridging The Gap To First-Time Buyers 106

Creativity can help span the affordability abyss. The developments shown in this feature cover four disparate regions of the country. Through various means—opportunistic land acquisition, public/private partnership, or special designs—these builders and developers have managed to undercut the average housing price in their markets. By doing so, they reach significant numbers of first-time buyers.

Excellence In Advertising: Sixth Annual Target Awards 116

To foster and encourage better advertising in the home building field, *Professional Builder* and the Builders Advertising Journal newsletter present the Target Awards, the only national awards program designed solely for real estate advertising. Entries are evaluated in a number of advertising categories: magazines, newspapers, direct mail, radio/television, outdoor and brochures. From over 400 entries, 21 grand and numerous merit award winners were selected. All have successful sales records.

The PB Home Of Quality, Value & Affordability 132

Country Gardens, a 1855-square-foot two-story home, is attracting Southern California "equity refugees" with a bargain-basement price of $170,000. One element of the value equation is handling buyer upgrades—none are allowed. According to Hiroko Ogata, principal of the developer R&H Homes, bringing these homes to the market "fully loaded" simplifies production and keeps costs down.

On The Cover

Upscale quality at reasonable prices is the goal of Arvida Communities' Dockside at Water's Edge development outside Atlanta. Vernon Homes, one of 11 independent firms building homes at Dockside, has already sold seven of the 10 houses it will build, including this 2800-square-foot, three bedroom model. The architects were Frank Betz Associates. Photo by Steve Hogben.

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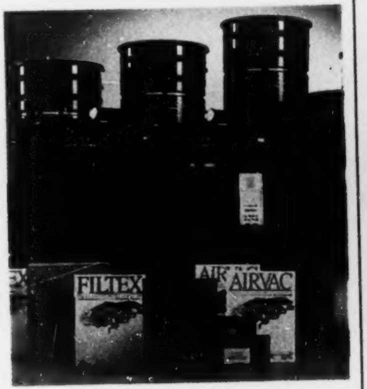
A new home design that maximizes child safety. Page 83.

Japanese investment in U.S. housing hit record levels last year. How important is it? Dan McLeister investigates. Page 22. **Modular housing** units have come to Cape Cod, reports Senior Editor Susan Bady, filling a need for local residents. Page 40. **Small builders** who position their firms on special niches are finding success in their markets. Page 50. **Public relations** can help build a positive image, especially on environmental issues. Page 63. **Frontyard pools?** Builder Gene Suttin uses them to profitably merchandise "non-view lots." Page 68. The **proper project name** can be one of the most critical factors in its success, says consultant Steven Byrne. Page 76.



Energy products and home automation technology. Page 136.

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Residential Markets Enjoy Surge In Japanese Investment

Single-family building gets the bulk of the $2.2 billion they invested last year—up from $700 million in 1988.

By Dan McLeister, Senior Editor

According to a recently released report, Japanese investment money is flowing into residential development in the United States at a rapidly increasing rate, with the bulk of the funds being put into single-family detached housing.

The latest figures from Kenneth Leventhal & Co., Los Angeles, indicate that Japanese investment in residential properties reached the $2.2 billion mark in 1989, accounting for 15 percent of Japan's total investment in U.S. real estate for the year.

This surge into the residential market—in 1988, the Japanese invested just $700 million (about 4 percent of total investment) in the housing segment—represented the single greatest shift in property type for Japanese investors last year. In 1987, the Japanese invested $1.3 billion (about 10 percent) in the residential market.

About 66 percent of the money invested in the residential segment in 1989 went toward the single-family detached housing market, said Jack Rodman, managing partner of the Los Angeles office of Leventhal. The Japanese are now more interested in residential markets, he explained, because they consider them to be less speculative than commercial projects.

The total $14.77 billion invested by the Japanese in all types of U.S. real estate last year was 11 percent below the record $16.54 billion posted in 1988. "This (overall) investment cooling was not unexpected," said Rodman, a specialist in Pacific Rim investment.

"Japan's largest institutional investors are examining Western European markets as the 1992 deadline for economic unification looms. What's more, a number of new construction projects launched in 1988 are not yet completed."

By the end of 1989, cumulative Japanese real estate investment had reached $57.65 billion, up from $42.88 billion in 1988.

While the Japanese have a great deal of money to invest, they tend to be highly selective. Rodman explained that they particularly like large residential communities situated around golf courses, and generally favor housing in planned communities.

According to Ed Miller, president of California Coast Builders in Los Angeles, Japanese investors are also attracted to luxury housing in communities that are perceived to be high-end, exclusive areas. His company has done several deals with Mitsui Fudson USA Ltd. of Los Angeles. One was for 82 houses priced from $1.1 to $1.6 million in Palos Verdes, Calif.

Rodman predicts that in 1990, U.S. residential investment activity for Japanese companies will remain at 1989 levels. He does not foresee another large surge in investment like there was from 1988 to 1989.

Investment By Property Type

Property type	1988 total dollar amount (millions)	1988 percentage of totals	1989 total amount (millions)	1989 percentage of totals
Office	$ 8,310	50%	$ 3,331	23%
Hotel/resort	3,577	22	4,158	28
Mixed-use	2,416	15	2,184	15
Residential	702	4	2,216	15
Retail	644	4	350	2
Industrial	310	2	305	2
Land	302	2	1,321	9
Golf course	202	1	394	3
Other	81	—	517	4
Total	$16,544	100	$14,775	100

Source: Kenneth Leventhal & Co.

Japanese Investments in residential properties jumped to $2.2 billion or 15 percent of total investment in 1988.

Getting a picture of residential activity is sometimes difficult, Rodman said, because housing construction data is also included in the hotel/resort category.

The hotel/resort category accounted for a healthy share of Japanese investment in 1989 and will continue to do so in 1990. Japanese purchases of hotels and resorts amounted to $4.16 billion last year—about 28 percent of their total real estate investment.

The Leventhal study also indicates that the size of the average Japanese deal has shrunk somewhat as they expand their geographic reach into smaller American cities and diversify their investments into other products. Japanese investors nevertheless remain bullish about acquisitions and development in U.S. property markets. "We can expect (overall) investment in 1990 to remain in the $13 billion to $16 billion range," Rodman said. "Fortunately for the American economy, the Japanese continue to find U.S. real estate prices appealing."

The Japanese are providing much of the equity capital sought by U.S. real estate companies in the wake of the savings and loan crisis and the retrenchment of commercial banks, Rodman noted.

He added that this source of equity capital has had the effect of moderating the housing affordability situation: "I view it as a valuable form of capital. It has provided stability and given the United States a healthy home building market.

The diversification in property types is mirrored by the diversification in investors. For example, construction/development companies increased their level of involvement in 1988 and 1989. Individual investors/investment companies and miscellaneous public/private companies have also increased their investment shares.

The growth in these two categories of investors includes many smaller investors and non-real estate companies that constitute what Rodman called the "second wave" of Japanese investment in the United States. The first wave of investors was dominated by a

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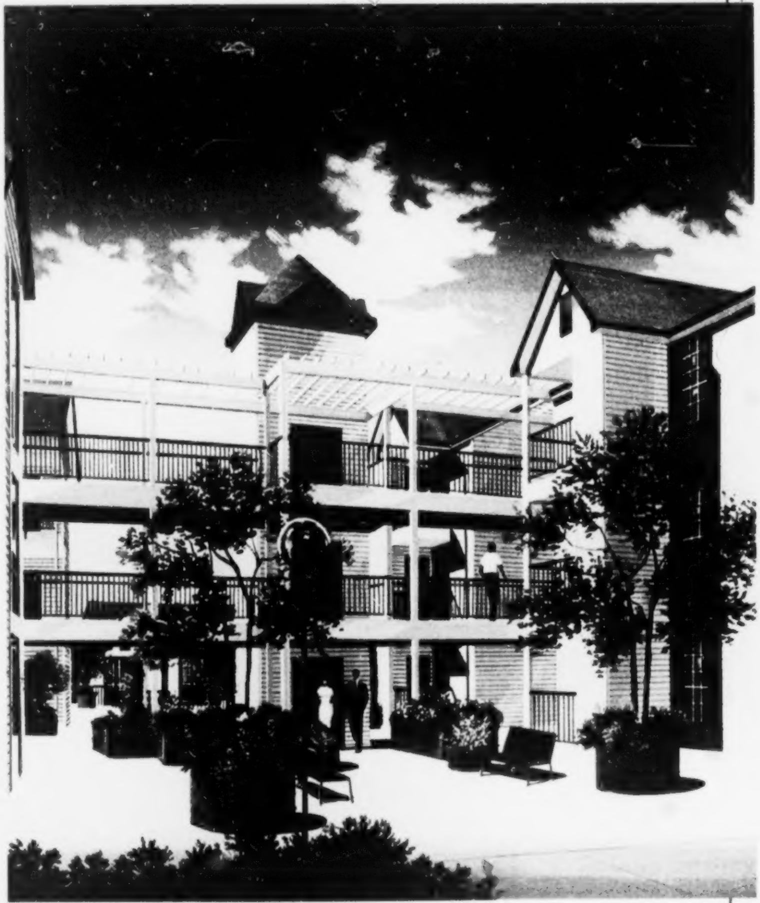
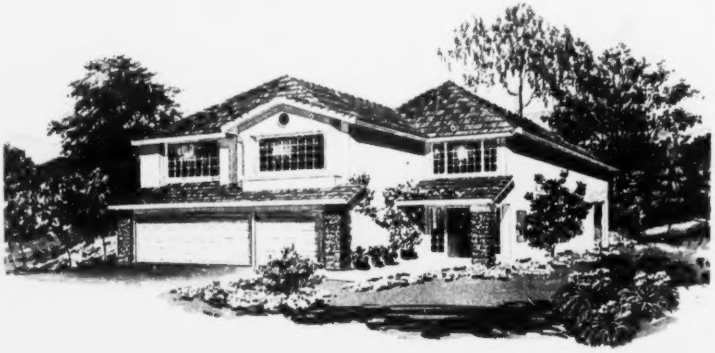


Rendering shows apartment units being built in Atlanta by Dominion Holdings in a venture with Haseko. Single-family house drawing shows plan being built by Ahmanson Developments Inc. with Sumito Realty (Georgia) Inc.



Japanese money helps replace savings and loan funds

Continued from page 23

small number of large companies, a segment that is now showing declining levels of investment.

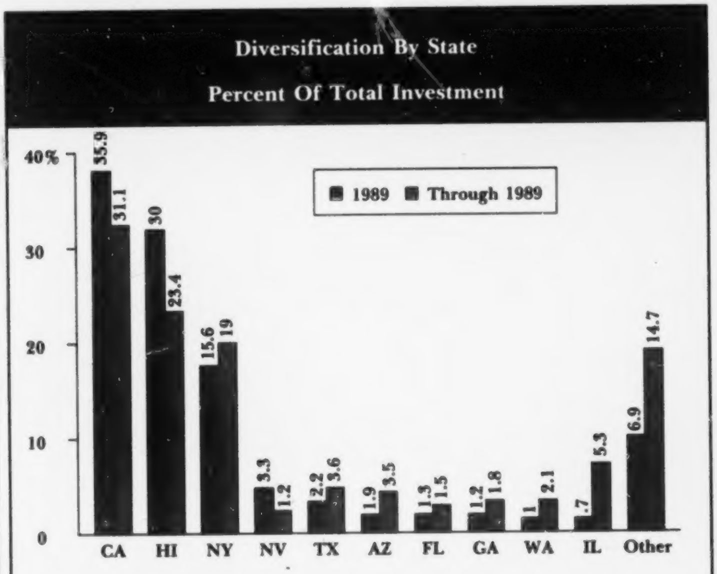
Another change from the first wave to the second wave is that Japanese investment in office properties has dropped dramatically. Office properties, which made up about half of total Japanese real estate investment in 1988, accounted for just 23 percent of it in 1989.

One trend that has continued into 1989 is the concentration of Japanese investment in three core states: California, Hawaii and New York. These three states captured 81 percent of the total investment in U.S. real estate in 1989, compared with 62 percent in 1988 and 68 percent in 1987.

One of the more sizable deals in California last year, for example, occurred when Ahmanson Realty Co. of Los Angeles put together an investment package with Sumitomo Realty of Laguna Niguel for 1000 single-family houses in five different subdivisions. Jeffrey Gault, chairman of Ahmanson Realty, said he considers Asia in general (and Japan in particular) to be the greatest source of high-risk equity capital. Money from there fills a void left by the decline of the thrift institutions, he said.

Moving beyond these top three states, Japanese investors are diversifying into new areas. One example of that is Haseko, a company that in the past has focused on California and New York. The company currently has nine joint venture partners in California, for example, doing deals valued at "a couple hundred-million dollars," said Terry Tornek, vice president of Haseko (California) Inc.

Now the company is developing projects in Atlanta. These include an apartment project with Dominion Holdings of Atlanta, and single-family houses with Horshoebend Corp. While the Atlanta-based division of Haseko has no immediate plans to initiate projects elsewhere, Jim Garrigus, executive vice president of Haseko (Georgia) Inc., indicated that a market like Orlando, Fla., might be next. ☐



Source: Kenneth Leventhal & Co.

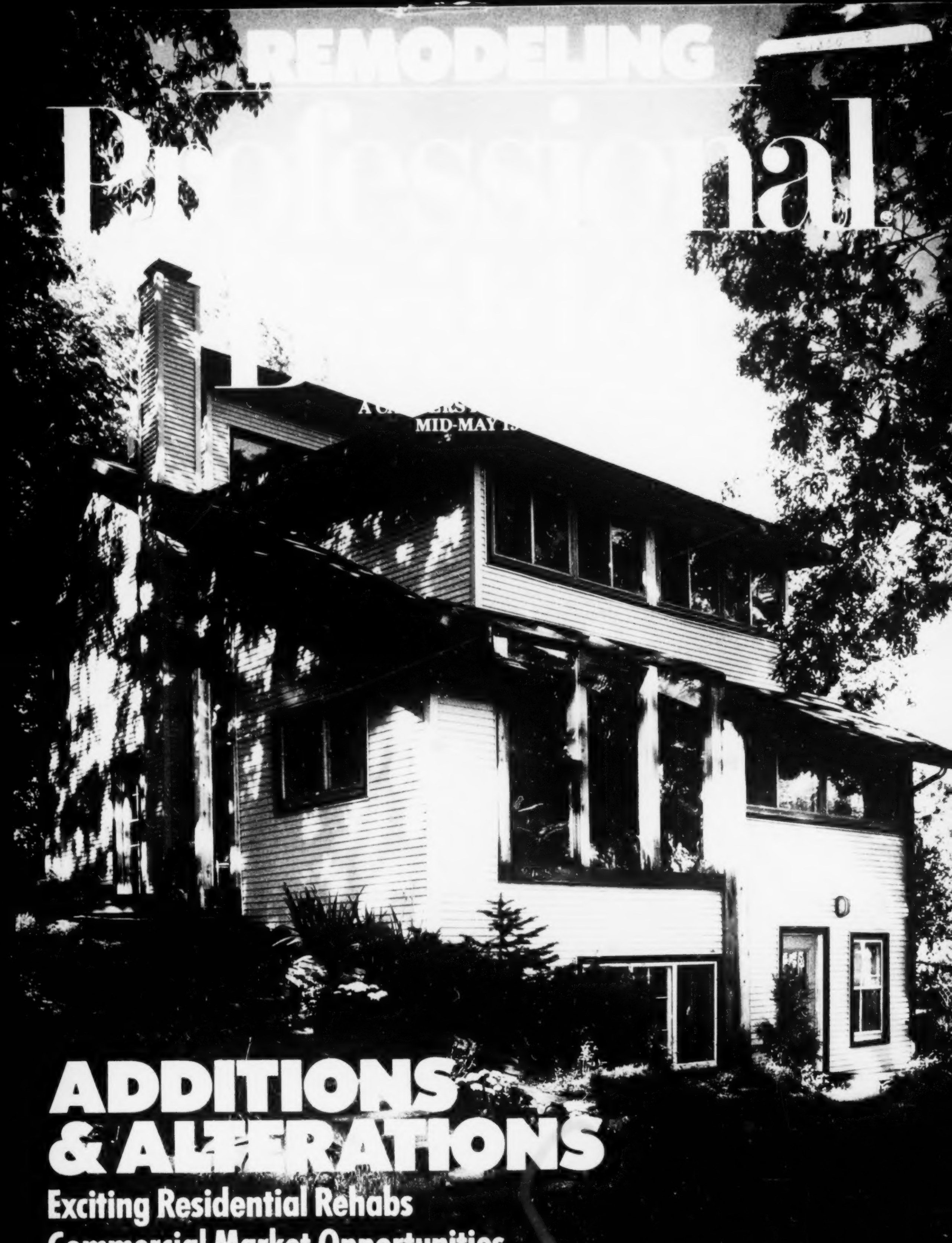
Japanese investment for 1989 was concentrated in California, Hawaii and New York. These states captured 81 percent of the total investment.

Investment By Investor Type

Investor type	1988 total dollar amount (millions)	1988 percentage of total	1989 total dollar amount (millions)	1989 percentage of total
Construction/development company	$ 6,156	37%	$ 7,222	49%
Individual investor/ investment company	1,563	9	3,034	21
Miscellaneous public/ private company	2,471	15	2,549	17
Life insurance company	2,610	16	891	6
Financial company	914	6	318	2
Trading company	728	4	84	1
Other unclassified companies	2,102	13	677	5
All companies	$16,544	100%	$14,775	100%

Source: Kenneth Leventhal & Co.

Construction/development firms spent more money in 1989. Activity by individual investors/investment companies and other companies also increased.



REMODELING Professional

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MID-MAY 1

ADDITIONS & ALTERATIONS

Exciting Residential Rehabs

Commercial Market Opportunities

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There are scores of dull houses in desirable neighborhoods. These projects show how remodeling spices up bland housing.

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Three savvy builders used restaurant restoration to beef up their bottom lines.

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Adaptive re-use projects count on creativity to succeed. These remodels show how builders took the "non" out of "non-res."

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Retail/Service Buildings Becoming Hot Markets

The commercial market is sluggish now, but there will be good opportunities in the years ahead.

Much has been said about the need for builders to diversify if they are to take advantage of promising market opportunities. One area the forward-looking builder should consider is light commercial construction. The opportunities available here for the residential builder are seldom discussed in any detail. But the size of the typical residential contracting firm and the skills of its employees closely match the needs of the light commercial segment of the non-residential construction market.

Data from the 1987 Census of Construction Industries shows the surprising extent to which residential builders have already diversified into non-res areas. Among the 90,000 establishments classified as residential general contractors, fully 26 percent also did some work on non-res buildings. About $2.5 billion worth of non-res construction was performed by these single-family residential contractors, with 48 percent of the total going for remodeling.

The specific type of non-res building that residential contractors are most likely to be working on is classified as "other commercial buildings." This group excludes office buildings and hotels, but includes service establishments such as restaurants and stores. A special 1986 survey on non-res buildings found that a combined 43 percent of all construction dollars spent on these kinds of buildings went for either improvement or upkeep work. For every dollar spent on the construction of retail or service space, 47 cents is spent on additions and alterations, and another 29 cents is spent on the maintenance.

We expect non-res remodeling, reconstruction, and conversion work to present better opportunities than new commercial construction. Retailing is a dynamic industry that must constantly change to meet customer needs.

The demand for remodeling work in this sort of building is driven by the need for retailers to make the changes required to maintain the visual appeal and general ambience of the store. This includes the redesign or expansion of display space, changes in lighting and signage, and the updating of exterior style and design.

Despite the current sluggish state of the construction market for retail and service buildings, we believe the diversified builder will find good opportunities in light commercial work in the years ahead. ☐

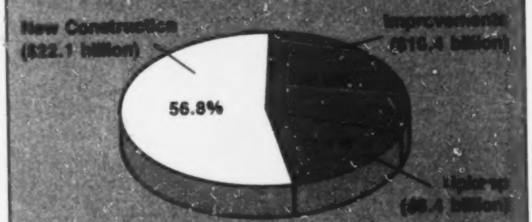
By Daryl Delano, Cahners Economics, Newton, Mass.

Selected Areas With Healthy Increases In Building Permits For Retail And Service Building—1989

Ft. Lauderdale-Pompano Beach	+[illegible]%
Jacksonville	32.1
Ft. Worth-Arlington	28.2
Tampa-St. Petersburg	25.5
Baltimore	17.4
Greensboro-Winston-Salem	16.2
Honolulu	15.8
Orlando	15.2
Pittsburgh	13.3
Seattle	13.0

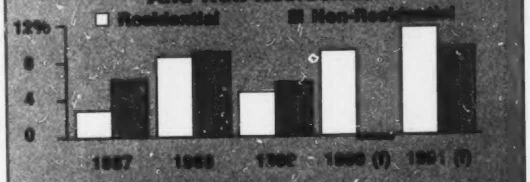
(Over-the-year percent change.) Source: U.S. Department of Commerce.

Where Construction Dollars Go For Work On Retail And Service Buildings



(1986 Estimates.) Source: U.S. Department of Commerce special survey.

Trends In Addition, Alteration & Conversion Spending Residential And Non-Residential



(Annual Percent Change—Current Dollars.) Source: U.S. Department of Commerce (Residential data from the spending series, non-residential data from the building permit series). Forecast: Cahners Economics.

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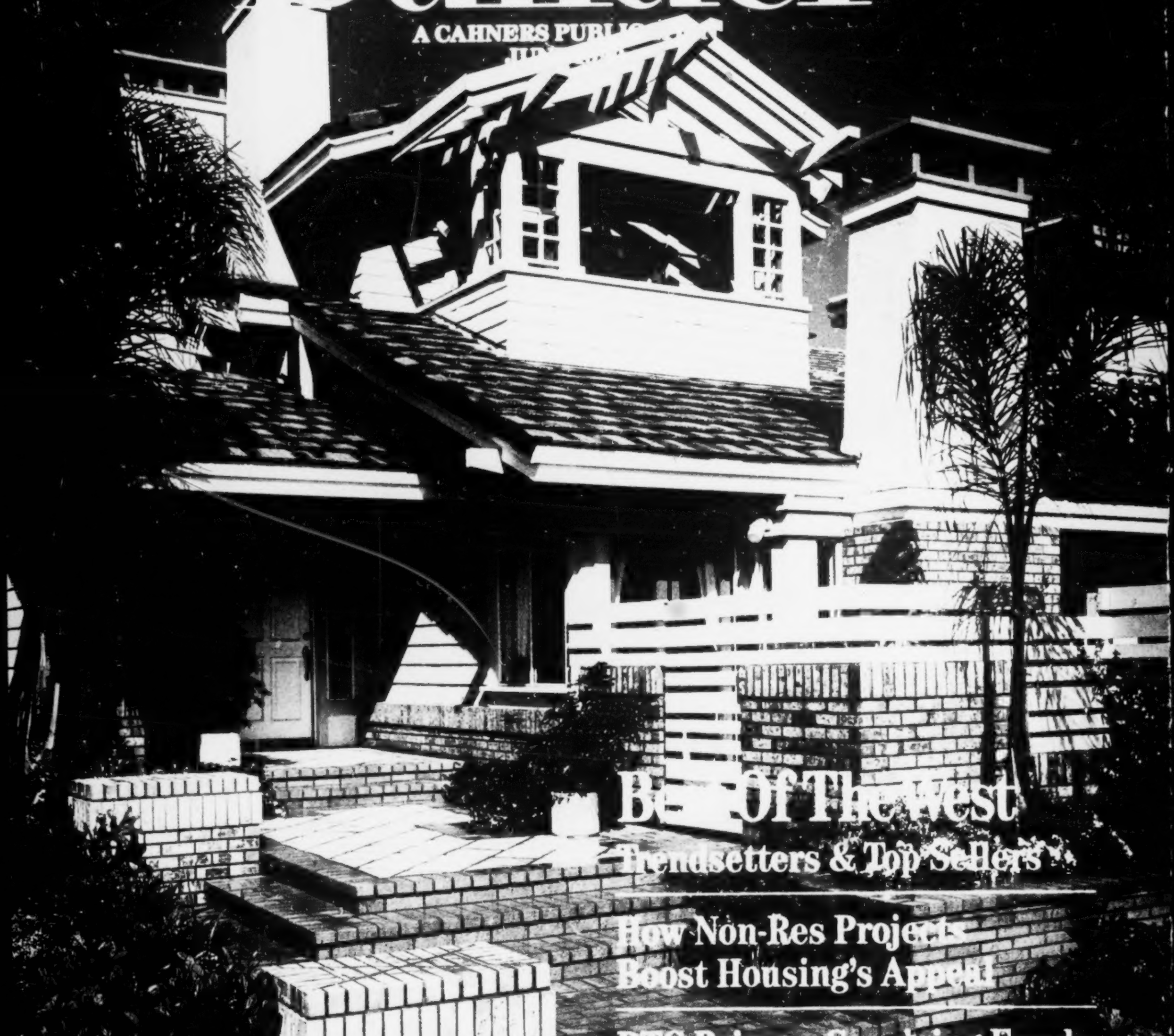

Best Of The West

Trendsetters & Top Sellers

How Non-Res Projects
Boost Housing's Appeal

RTC Primer: Surviving Funds
Cutoffs & Regulatory Hassles

New House Plans Available

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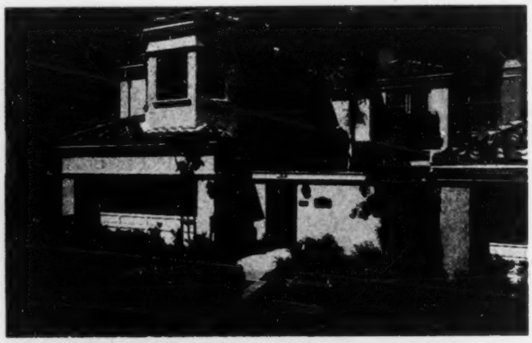

Echo Ridge in Sam Ramon, Calif., overcomes a high-density site plan by offering plenty of privacy features such as courtyard entries. Page 84.

The self-contained urban village design of Hassinger Cos.' 144-unit Sauganash Village in Chicago is one of the keys to its recent success. Page 106.

After solving some tricky technical problems, Unique Construction, Hopkinton, Mass., created modern interiors out of this late 18th century house. Page 117.

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The Best Of The West 84

Some of the nation's hottest housing markets are found in the West—Las Vegas, the San Francisco Bay area, and Seattle. To take the pulse of this dynamic region and report on the latest design trends driving it, the editors of *Professional Builder* logged thousands of miles and visited hundreds of model homes.

In this feature, Senior Editors Dan McLeister and Wayne Endicott take an in-depth look at an outstanding collection of best-selling models from this sizzling region. These projects not only cover a broad range of architectural influences, such as the turn-of-the-century California style or the Mediterranean "country" look, but offer solutions to challenges such as high-density sites or price-resistant markets.

Non-Residential Designs That Enhance Housing 106

For many diversified builders, non-residential construction is more than an opportunity—it's a necessity. Senior Editor David Heinly reports on a series of projects that illustrate how bringing community services and recreational amenities to urban and high-density developments can be the marketing edge that spells sales success.

Remodeling Project Of The Month 117

Peter Porter's rehabbing skills were put to the test converting a pair of 200-year-old homes into townhouses. The Grafton, Mass., project was something of a nightmare for Unique Design and Construction, but the results have captivated buyers. New third-floor balconies capitalize on views of the woods, valleys and old colonial homes of a neighboring historic district.

On the Cover

The J.M. Martin Co. has a winner in Huntington Beach, Calif., with its Huntington Classics: 11 of the 16 houses offered were sold on opening day last December. The architect was Warkentin Wraight, Costa Mesa. The interiors were decorated by Design 1 Interiors of Los Angeles. Photo by Robert Freed.

Professional Builder

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Designs that cater to single women and empty nesters. Page 51.

If you thought staying current with payments keeps a performing loan safe once the **Resolution Trust Corp.** (RTC) takes over an S&L, think again. The saga of builder Rick Snodgrass' battles is an eye-opener. Page 22. **A focused plan mixed with demographically driven designs** can help fill special market niches. Page 51. Can a computer program plan **the perfect ad campaign**? Page 60. An American builder has announced **the first joint venture** with the Soviet Union. Page 66. Turning retention/detention requirements into **marketable water amenities** often pays off in fast sales. Page 75.

A look at the latest trends in window products. Page 122.

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UPDATE

FIRREA Curtails AD&C Lending: NAHB Survey

The preliminary results of a new survey of NAHB members indicate that more than half have had to alter building plans due to the new lending practices of thrift institutions and commercial banks.

The principal change in thrift institution lending has been to reduce amounts loaned. However, half the respondents said that their thrifts no longer even make loans for acquisition, more than 40 percent won't fund development, and one in four will not make loans for construction. When loans are made, thrifts are demanding a stronger equity position or requiring excessive documentation.

Reasons Thrifts Changed Their Lending Practices (Percent of respondents)

	Acquisition	Development	Construction
No reason given	6%	5%	8%
New limits on loans to one borrower	56%	56%	53%
New capital requirements	47%	46%	45%
RTC takeover of the thrift institution	23%	21%	20%
New limits on commercial real estate	24%	27%	23%
Tough regulators examiners	51%	55%	52%
Director's concern about liability	16%	14%	18%
Other	5%	5%	5%

Source: AD&C Financing Survey Preliminary Report, NAHB.

Commitment To The Poor

The Fieldstone Co., Newport Beach, Calif., has announced its first partnership with Habitat for Humanity International, a non-profit organization dedicated to the housing needs of the poor and homeless. Fieldstone is donating two acres of land in the master planned community of Rancho Santa Margarita for the construction of 48 condominiums ranging in size from 650 to 1150 square feet.

Groundbreaking is slated for August 1990. The builder will serve as facilitator for the project, handling planning, political approvals, job coordination, construction financing and overhead. Santa Margarita Co. is master planner for the community.

Fannie Mae Will Buy Affordable Housing Loans

Institutions originating mortgages for low- and moderate-income families under the Federal Home Loan Banks' Affordable Housing Program (AHP) and Community Investment Program (CIP) can now sell these loans to Fannie Mae.

Thrifts must first obtain an advance from their District Bank to make permanent mortgages under the terms of either the AHP or CIP. The loans can then be swapped for a mortgage-backed security, called a Fannie Mae Affordable, in single-lender pool amounts of as little as $250,000. Fannie Mae is already working with about a dozen institutions that have applied for first-round 1990 AHP funds.

Lead-Based Paint Cleanup Guidelines Released

Technical guidelines for the cleanup of lead-based paint in residential structures have been published by HUD and are available from the National Institute of Building Sciences for $45. The address is 1201 L Street, NW, Washington DC 20005.

The HUD guidelines could become the abatement standard for the private sector as well, according to James Keck, chairman of NIBS's project committee for lead abatement guidelines. The government estimates that 52 percent of the nation's 80 million housing units contain potentially hazardous levels of lead-based paint. Some officials call lead-based paint the most serious issue confronting remodelers.

Regional Report: Is Texas Back?

That depends on who you ask. Most Texas builders and developers say the strong residential rebound in Dallas and Houston will continue, but some outside investors remain leery. The key factors—employment, job creation and population growth—are on the developers side, and corporate relocations are fueling optimism.

But while 1989 new home sales were up 25 percent in Houston (from a record low), there are far fewer players, and there's a four-year supply of finished lots in both Houston and Dallas. Coming layoffs at a number of Texas-based defense contractors also will offset growth. There are clear signs the economy is strong, said Boston investor Charles Burd, but he does not see a large a flow of capital headed for the Lone Star state just yet. "Most people are waiting for the RTC dust to settle, but Texas is a lot better off than the Northeast is."

Residential remodeling spending starts to bounce back

While residential construction spending has responded slowly to the modest pickup in economic activity and marginally lower interest rates, there are encouraging signs for the remodeling market. The seasonally adjusted annual rate of expenditures for the upkeep and improvement of residential properties (commonly called "residential remodeling") rose 8.3 percent between the first and second halves of 1989, to a level of $104.9 billion.

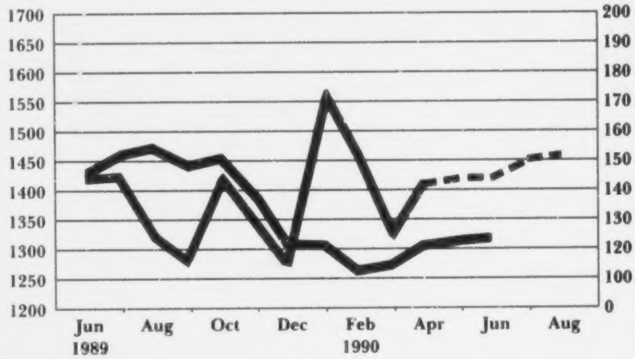
For 1989 as a whole, total residential remodeling spending was off 0.2 percent to $100.9 billion. New residential construction spending was, of course, also quite weak last year, declining a slightly steeper 0.8 percent. However, whereas remodeling spending recorded a sharp rebound during the final six months of the year, the seasonally adjusted annual rate of new residential construction spending during 1989's final six months was 4.7 percent lower than for the first half of the year.

While the upward trend in remodeling spending is good news, homeowners remain cautious about undertaking large remodeling projects.

Contrary to what some in the business might think, only a small part of the maintenance and repair market is "do-it-yourself." In 1988, for example, less than 24 percent of the $17.9 billion worth of spending on the maintenance and repair of single-family homes was for the purchase of building materials for jobs done by the owner. The other 76 percent, or $13.7 billion, was paid directly to contractors or was used by the homeowner to purchase materials for repair jobs later done by contractors.

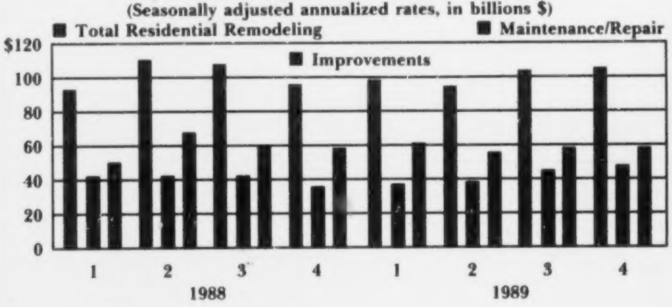
Residential contractors should not be surprised to find a slight decline in the average value of residential remodeling jobs undertaken this year. However, the opportunities will be there, and in greater numbers than last year, because of pent-up demand, continued increases in real household income, and the growth in the number of two-worker families. ☐

By Kermit Baker, Cahners Economics, Newton, Mass.



Professional Builder Leading Indicator And Housing Starts

Broken line denotes forecast. Leading Indicator of Housing predicts short-term changes in residential construction over approximately the next quarter. Latest figure is based on May data and includes the Standard and Poor's home-builder stock index, 90-day T-bills, bank reserves, consumer confidence index and the ratio of homes for-sale to those sold. Prepared exclusively for PB by Cahners Economics.



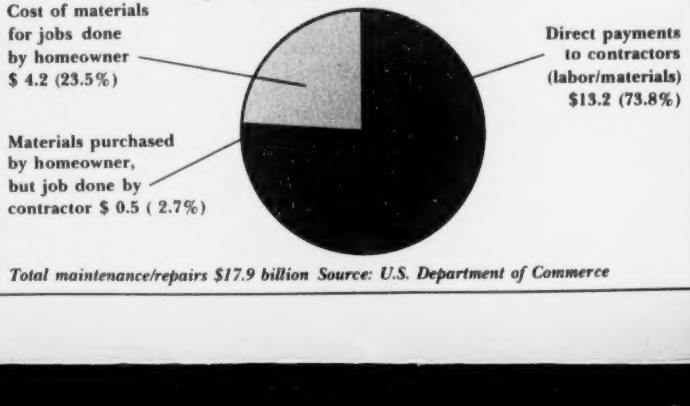
Residential Remodeling Heads Back Up—Led By Spending On Smaller Jobs

(Seasonally adjusted annualized rates, in billions $)

Source: U.S. Department of Commerce

Helpless Homewoners Look To Contractors To Get Even Small 'Fix-Up' Jobs Done Right

(Billions of $, share of total 1988 maintenance & repair spending on single-family homes)



Total maintenance/repairs $17.9 billion Source: U.S. Department of Commerce

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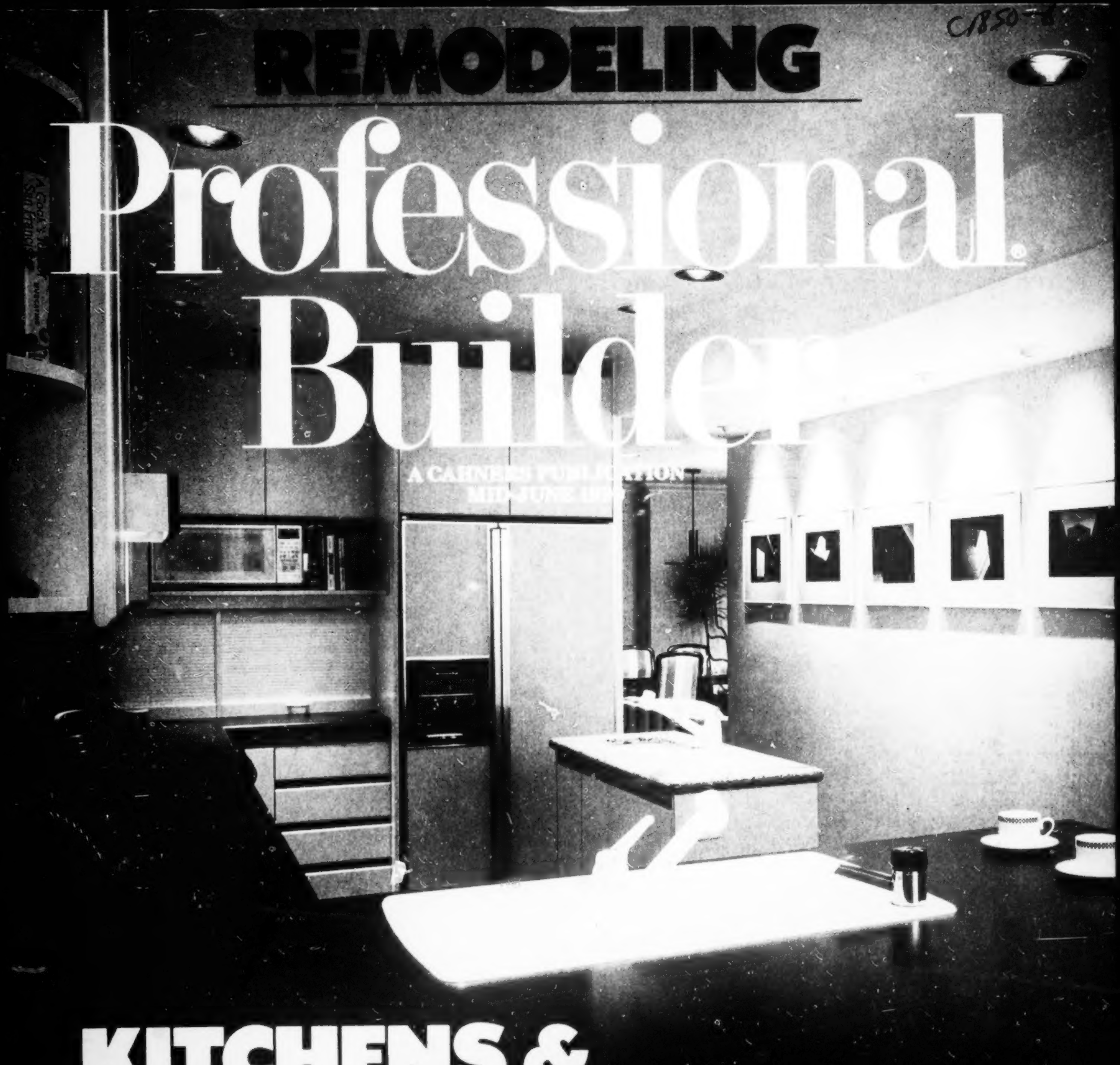

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KITCHENS & BATHS

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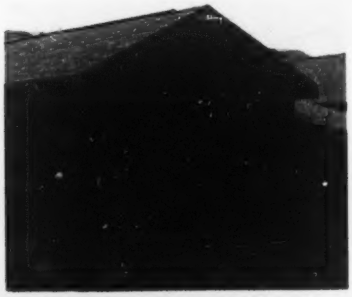

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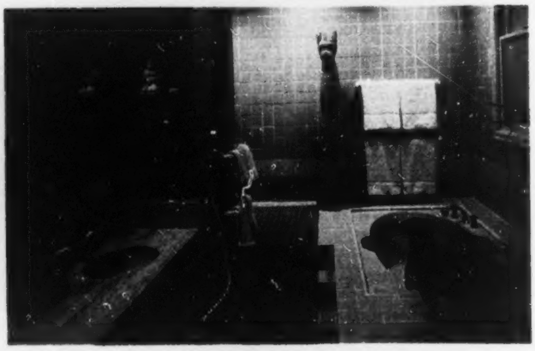

Works Of Art, page 58.

Works Of Art/58

A California home has a new "gallery" kitchen. In Northville, Mich., Cohen-Shawn Building Co., created a stunning design with geometric figures.

Help Owners Move Up Without Moving/66

More often, owners are choosing not to leave the homes they love. Five remodeled homes demonstrate how kitchen and bath rehabs can give the old homestead a fresh classy look.

Luxury Revisited/74

Remodeling typically involves customizing. The projects featured created entirely new luxury lifestyles for the owners of these homes.

PRODUCTS/86

Update baths and kitchens with new products.

HOUSE PLANS/101

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Remodelers Say Market Continues To Be Strong

Exclusive survey indicates that four out of five contractors expect business to keep booming.

In a survey conducted among its readers who are involved in remodeling, *Professional Builder* has learned that more than four out of five expect a strong business climate to continue. In fact, more than 20 percent of the respondents described remodeling business in their areas as "hot," and an additional 60 percent characterized their local market as "warm."

Only slightly more than two percent of those who took part in the survey reported a cold market.

According to the results of the survey, the average remodeler placed bids on approximately 18 jobs during the previous six month period, and reported success in approximately 65 percent of them—getting 12 of the 18 jobs they bid.

The number of jobs bid varied greatly from contractor to contractor. The largest percentage of respondents—fully 28 percent—said that they bid on six to nine jobs in that six month period. However, nearly 20 percent bid on fewer than six jobs. Approximately 13 percent said they bid on 10 to 14 jobs, while 11 percent said they sought out 15 to 20 jobs. The remainder of the respondents were split evenly between the "21 to 30 jobs" and "over 30 jobs" categories.

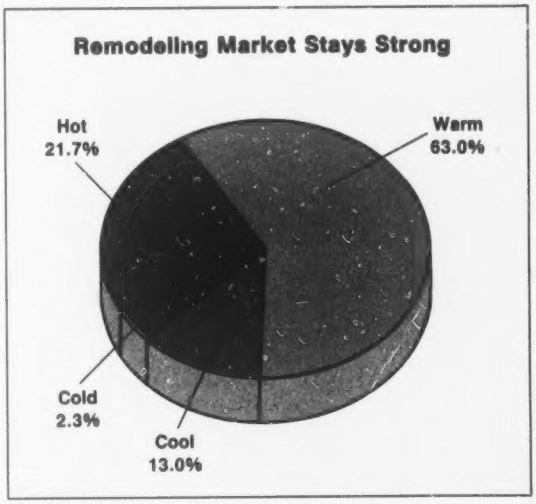
While the average number of successful bids was 12 jobs per remodeler, nearly 35 percent reported that they were successful on less than five of the jobs they bid on during the six-month period studied. Fully 24 percent said that they received the six to nine jobs in that period, and another 15 percent reported success on between 10 and 14 bids.

When possible, customers or remodelers obviously still prefer to pay for their upgrades with cash. More than 71 percent of the remodelers surveyed said that at least part of the job was paid for in cash.

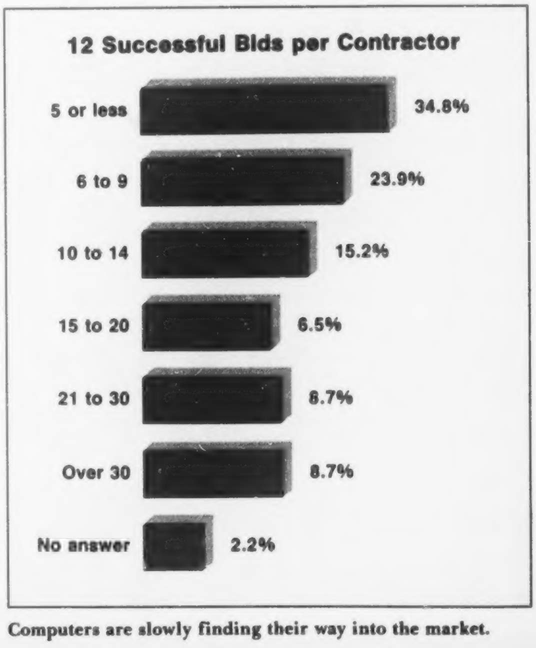
The next most popular financing option was a home equity loan. Remodelers said that nearly 60 percent of their customers opted for that financing method. Remodelers themselves also get involved in carrying their customer's financing—with more than 15 percent of the group surveyed providing some of the remodeling money.

Another major option is a second mortgage—used nearly 35 percent of the time. Involvement with the FHA comes only 6.5 percent of the time.

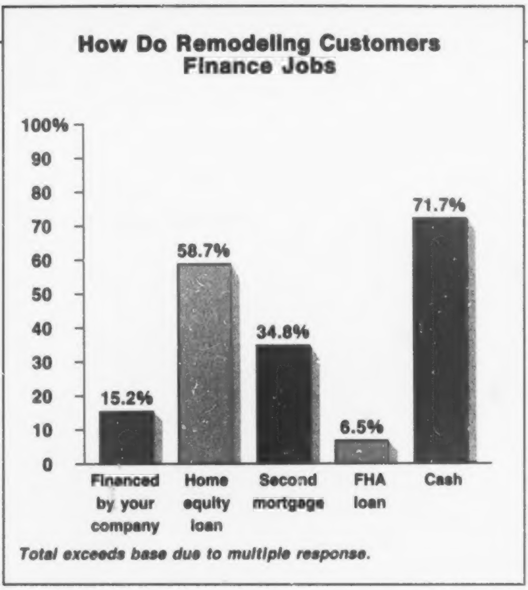
Remodelers have become sophisticated in their estimating techniques, apparently. Two-thirds of the time, completed jobs came in on



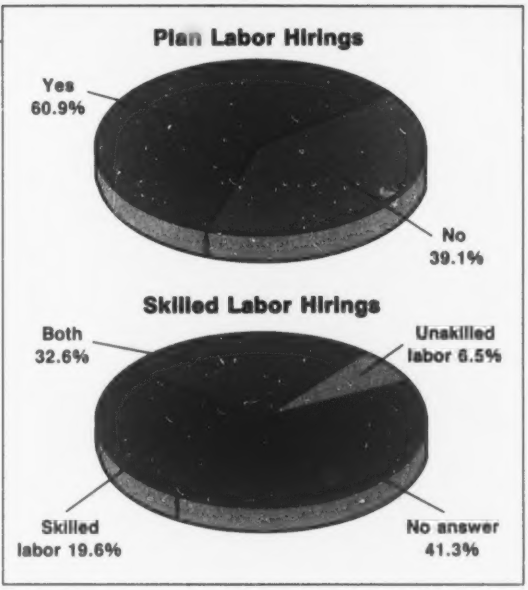
The market for remodeling continues to heat up with more than 20 percent of those studied reporting it as sizzling.



Computers are slowly finding their way into the market.



More than 70 percent of remodeling customers use some saved cash for their remodeling work. When financing is used, the favored vehicle is a home equity loan.



More than 60 percent of contractors will hire new labor during the near term—most of it skilled.

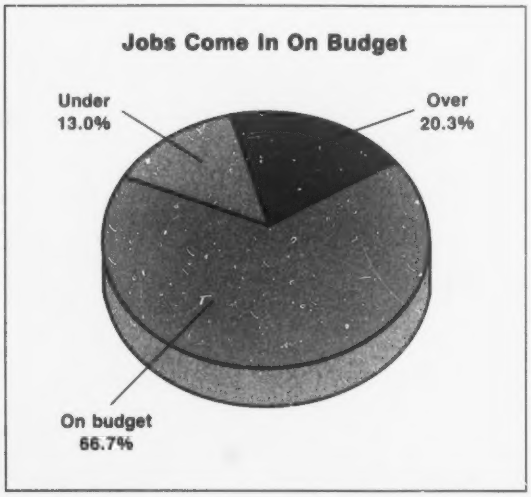
budget.

It is hardly surprising that in this growing environment for remodeling, survey respondents were planning to hire additional labor for the immediate future. More than 60 percent said that they would be adding either skilled or unskilled labor to their pool. Of those who will be adding additional help, nearly 37 percent said that it would be mixed between the skilled and unskilled. Nearly 20 percent said they would be adding only skilled labor and only 6.5 percent that they would include only unskilled labor in future hiring plans. Forty percent failed to specify.

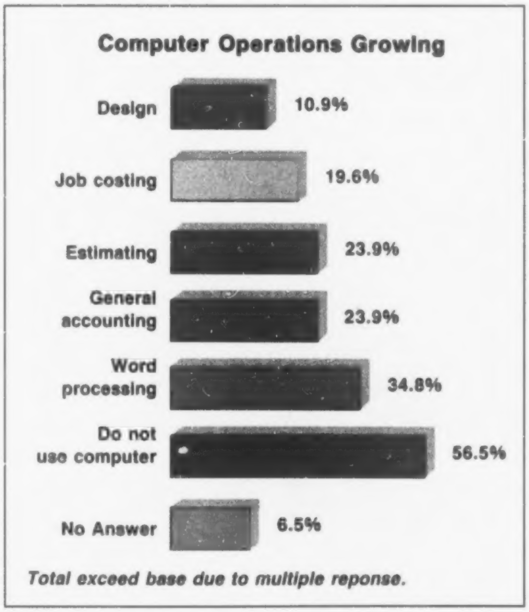
Computers are still finding their way into remodelers' arsenal of management tools, the survey shows. Less than half of those surveyed report that they now use computers.

Among those responding to the survey, word processing, general accounting and estimating and job costing were the most frequent functions for which they turned to a computer. Nearly 35 percent used computers for word processing. An equal number—about 24 percent—use computers for estimating and general accounting. Approximately 20 percent seek electronic help for their job costing. Only about 11 percent use computers to aid in design. □

By Wayne A. Endicott, Senior Editor



Remodelers report that in general, they manage to bring their jobs in on budget.



The average respondent reported that he bid 18 jobs during the past 12 months. Successful bids per remodeler approached 12 apiece during the 6-month period of the study.

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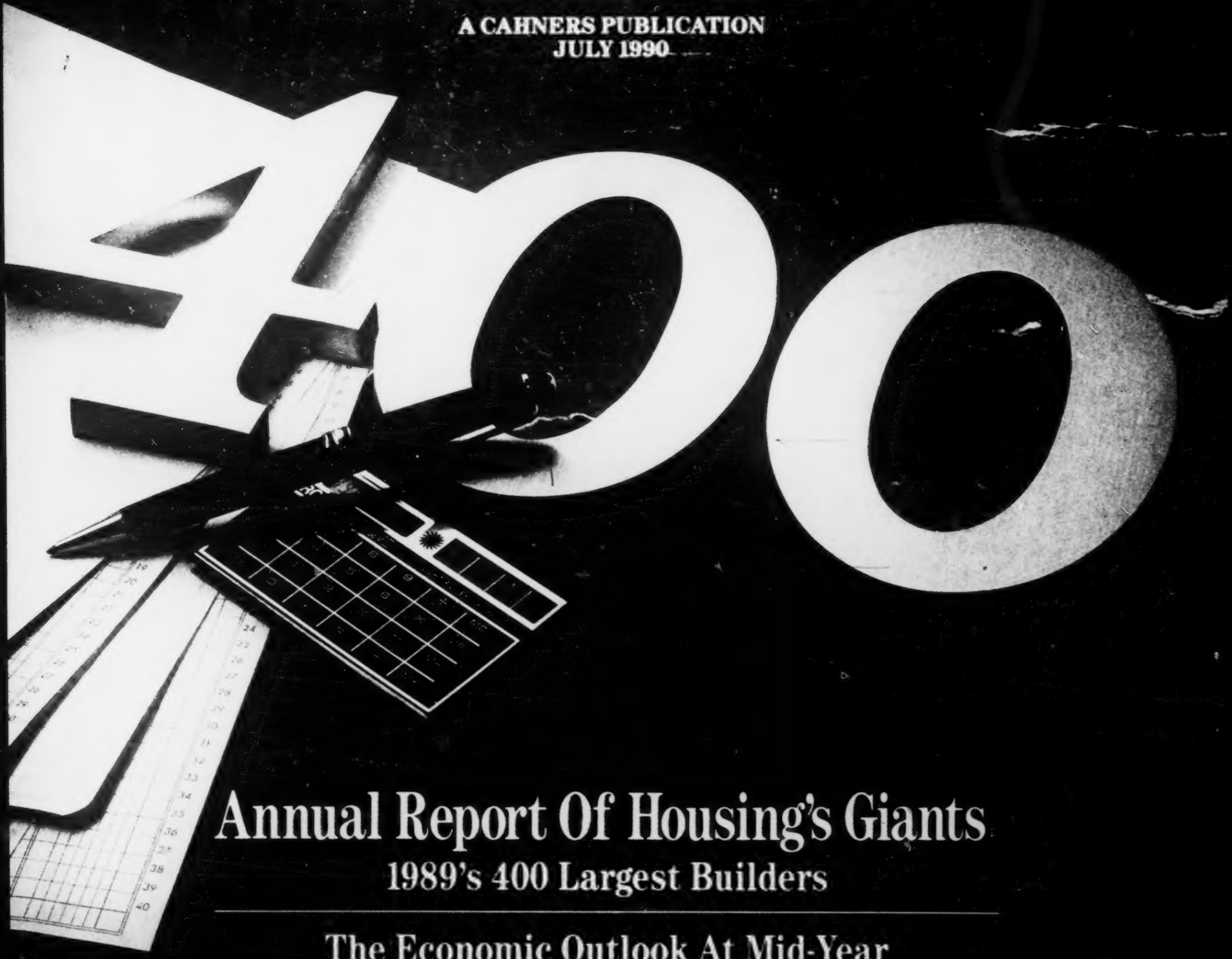
JULY 1990



Annual Report Of Housing's Giants

1989's 400 Largest Builders

The Economic Outlook At Mid-Year

Award-Winning Projects From The West

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27 House Plans Available

Professional Builder

JULY • 1990

VOL. 55

THE MAGAZINE OF HOUSING AND LIGHT CONSTRUCTION/A CAHNERS PUBLICATION

An unusual exterior design prompted the 1990 Gold Nugget award judges to honor this Carefree, Ariz., custom home. Page 72.

Once again, Trammell Crow is the top-ranked Giant. For an in-depth look, see the 23rd ANNUAL REPORT OF HOUSING'S GIANTS®. Page 90.

Fox & Jacobs' Sterling model at Palos Verdes in Arlington, Texas, offers first-time and move-up buyers 1700 square feet for $85,950. Page 198.

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Gold Nugget Award Winners 72

If you're looking for creative housing ideas, study the seven projects featured in this story very closely. They are among the winners of the 1990 Gold Nugget Awards competition of the Pacific Coast Builders Conference.

This hotly contested competition salutes outstanding achievement in architectural design and land-use planning for residential and commercial projects in 14 Western states. *PB* senior editor Dan McLeister was one of the judges.

Advice From The Giants 84

Builders, both large and small, are confronted with an array of problems that extend beyond the nitty-gritty of market competition.

To learn more about the strategies the Giants will employ, *PB* interviewed a number of industry leaders on a variety of topics such as surviving the disarray in the financial markets, coping with regulatory restraints and providing affordable housing.

ANNUAL REPORT OF HOUSING'S GIANTS®: The Giant 400 90

According to *Professional Builder*'s 23rd ANNUAL REPORT OF HOUSING'S GIANTS®, 1989 was neither the best nor the worst of times for Giant builders. The Giant 400 turned out 493,269 new houses, apartments and mobile homes last year, with total revenues coming in at $56.9 billion, down only slightly from the previous year's survey.

This exclusive report offers a detailed look at what, how and where they built, including: ☐ Rank by total units, page 98. ☐ Rank by for-sale and rental units, page 100. ☐ A listing by headquarters states, page 102. ☐ Rank by total revenues, page 104. ☐ Alphabetical index, page 192.

QVA Award Winner 198

Smart first-time and move-up buyers in the Arlington, Texas, market can parlay $85,950 into a first-rate location, 1700 square feet of living space and loads of amenities.

Where? At this month's *PB* Home of Quality, Value & Affordability, Fox & Jacob's Sterling model.

Professional Builder

THE MAGAZINE OF HOUSING AND LIGHT CONSTRUCTION/A CAHNERS PUBLICATION

Sales centers that make strong selling statements. Page 45.

Housing forecast at midyear indicates that better days are ahead despite the painfully slow recovery seen in the economy so far this year. An exclusive market summary and forecast from Cahners Economics. Page 22. **A war over AD&C funding?** NAHB seems ready to fight now that it is armed with the results of a new survey of builders. Page 27. **Faced with 20 competitors** on his doorstep, California builder Rick Doremus has found that heavily "theming" his two new developments made them stand out from the crowd. Page 45. **Demand for "healthy house"** features is growing as home buyers become more familiar with the concept. Page 59.

Kitchen products, including appliances, fixtures. Page 200.

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UPDATE

Loans-To-One-Borrower Transitions Considered

A plan was reportedly under review by Treasury officials in early June to ease the loans-to-one-borrower rule imposed under the thrift industry reform bill. With Congress reluctant to take up amending legislation this year, Office of Thrift Supervision (OTS) officials have drawn up a plan to provide a transition despite earlier claims by OTS that the law provided no authority for it.

Under the plan, "healthy" thrifts could loan as much as 60 percent of their capital to a single borrower through the end of next year, 30 percent through 1992, then down to the 15 percent limit set under the law.

Lawmakers Call For Probe Into S&L Mismanagement

As cost estimates of the S&L bailout continue to escalate, scores of both Democrat and Republican lawmakers have called for the appointment of an independent counsel to investigate wrongdoing within the industry as well as among regulators, the White House and Congress itself.

Legislation was also proposed in the Senate to create a new financial services crime division in the Justice Department. Regulators have already referred more than 21,000 cases of possible fraud to Justice. The lawmakers' ire was stoked by the U.S. Department of the Treasury's latest estimate of bailout costs: At least $132 billion in direct outlays and possibly as much as $500 billion with the cost of federal borrowing included. Increased borrowing by the Treasury (in lieu of a tax increase), economists point out, is adding to upward pressure on interest rates.

Smart House Technical Details To Be Unveiled

The Smart House Limited Partnership is "taking the wraps off" its technology, according to Leon Weiner, chief executive officer, to give manufacturers an opportunity to evaluate and adopt its approach to home automation. "Because our system design has stabilized and because we will soon have patent and copyright protection in Japan, Europe and throughout the world," he said, "we can publicly disclose technical details that, until now, we've kept closely guarded."

It is expected that the Smart House system, now in prototype testing, will become commercially available next year. The Smart House organization will conduct a conference in Baltimore July 30-31, at which details of the system's design, applications language, system controller and programmers' guide will be made available to interested manufacturers.

Industry Leaders See Silver Lining In Financing Woes

Trammell Crow, chairman of Trammell Crow Residential Co., Dallas, and Neil Bluhm, chairman of JMB Realty Corp., Chicago, gave divergent views on capital availability at a recent board of directors meeting for the National Multi-Housing Council.

"Is there going to be money available?" Crow asked rhetorically. "The answer is clearly yes." The chairman of *PB*'s Top 1990 Giant said the 1990s will be good for multifamily builders, and not as good for single-family builders. While he conceded his company's housing starts will be down for 1990, there "will be adequate demand and financing to give us plenty to do."

Bluhm countered that developers are now suffering through a credit crunch that is only going to get worse. "The regulators have swept down on banks in the U.S. like a tent," he said. "But we shouldn't get all glum about this because in reality, it will make investors more wealthy." The big developers, he said, still have access to capital.

Outlook Remains Upbeat

Nearly one out of two builders are optimistic about their markets, according to a monthly builder panel survey commissioned by Owens Corning Fiberglas and *PB*. For the most recent reporting period, covering May-June 1990, 47.5 percent of builders said they expected market conditions to improve, 44.6 percent said they'll remain the same, and only 7.9 percent predicted that conditions will worsen.

One out of three builders reported that model traffic was off from the same period a year earlier, 23 percent said it had increased, and 41 percent said it was about the same. For builders reporting higher traffic in May-June, the average increase was 24.3 percent; the average decrease reported, 29.3 percent.

Model Traffic Off Slightly

How does home buyer traffic at your homes compare with the traffic during the same month last year?

	Dec.-Jan.	Feb.-March	May-June
More	25.0%	36.7%	23.0%
Less	28.1%	16.4%	36.0%
Same	46.9%	46.9%	41.0%

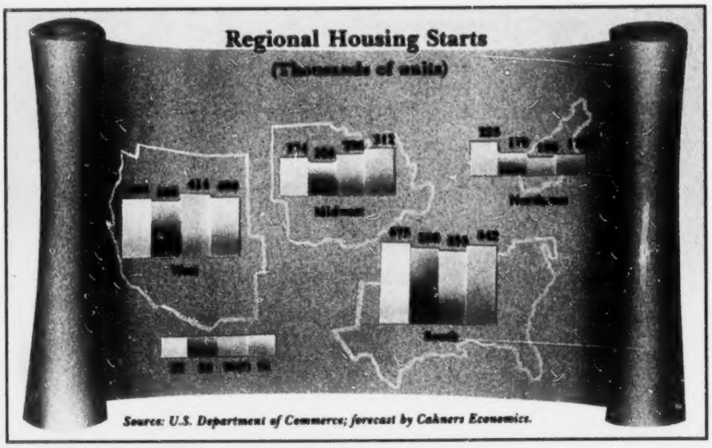
Source: OCF Contractor Tracker Study

BUSINESS/FINANCE

Housing At Midyear: Recovery Delayed, But Still Coming

Better days are ahead, despite the painfully slow recovery seen in the economy so far this year.

By Darryl Delano, Cahners Economics



Source: U.S. Department of Commerce; forecast by Cahners Economics.

Despite a disappointingly slow start over the first four months, we believe the trend for housing starts will be turning up this year. However, due to stubbornly high interest rates and excess inventory in parts of the nation, the recovery will be more muted than we at Cahners Economics had anticipated.

By year's end, we expect that a total of 1.41 million new units will have been added to the nation's housing stock—only a small improvement over 1989's 1.38 million unit total. All of the gain will come from the single-family side. The sharp multiyear decline in multifamily construction will be halted, but we expect little if any improvement from last year's depressed level.

We see 1991 as a marginally better year as economic activity accelerates and the housing supply/demand aggregates achieve a better balance. Look for 1.44 million starts next year.

The hoped-for rebound in new construction activity did not unfold during the first half of this year. Interest rates, which had been expected to fall further from their already moderating levels of late last year, actually "blipped" up during the first few months of 1990. In the absence of lower mortgage rates, sales of both new and existing homes stalled.

A number of factors caused the early-year rise in interest rates. International forces (including rising Japanese interest rates and the prospect of increased demand for capital from Central and Eastern European nations) pushed up short-term rates on all U.S. financial instruments. Domestic factors (such as accelerating consumer and wage inflation rates and a stronger-than-expected GNP growth rate) contributed to the Fed's reluctance to pursue a less restrictive monetary policy.

The most positive development for the housing industry was the laying to rest of any uncertainty regarding the economy's direction for the next 12-18 months.

There is nearly unanimous agreement that the economy successfully "dodged the bullet" and that a recession is not on the horizon. Real GNP grew at an annual rate of 1.1 percent during this year's first three months. Most agree that this represents the low point of the current business cycle, and that economic growth will be slow but improving through the balance of 1990 and into 1991. We are confident that the U.S. economy will successfully complete its eighth and ninth years of growth.

Regionally, the Northeast continues to suffer from a stagnating economy and an overbuilt/overpriced housing market. Through the first half of the year, the value of building permits for new residential construction was off 20 percent in New England and 10 percent in the Middle Atlantic states. Nationally, residential permit values were up slightly from a year earlier, with the best growth recorded in the Pacific, Mountain, and resurgent Oil Patch states.

While new construction activity was lackluster, there were signs that the residential remodeling market was bouncing back after a poor 1989. For the first time in seven years, spending on residential upkeep and improvement work failed to record any real growth. But in the second half, spending was at an annual rate of $105 billion, 8 percent above the discouragingly slow pace of the first six months. For the first few months of 1990, remodeling permits are running about 7 percent above the year-ago rate.

While the recent sluggishness in new construction and remodeling markets is discouraging, builders can take solace in the fact that the costs of doing business have been increasing only moderately.

Given that the recovery of construction activity over the next 18 months will be gradual and moderate enough to preclude any serious shortages in labor or materials, we expect construction-specific inflation to remain at or below the rate of overall consumer and producer inflation for the next two years.

Opportunities for the diversified builder and contractor should be somewhat better in residential markets than in light commercial markets. Spending on office buildings, a sector still very seriously overbuilt in many parts of the nation, declined slightly last year and will fall sharply in 1990. Spending on retail buildings should record only a marginal gain in 1990.

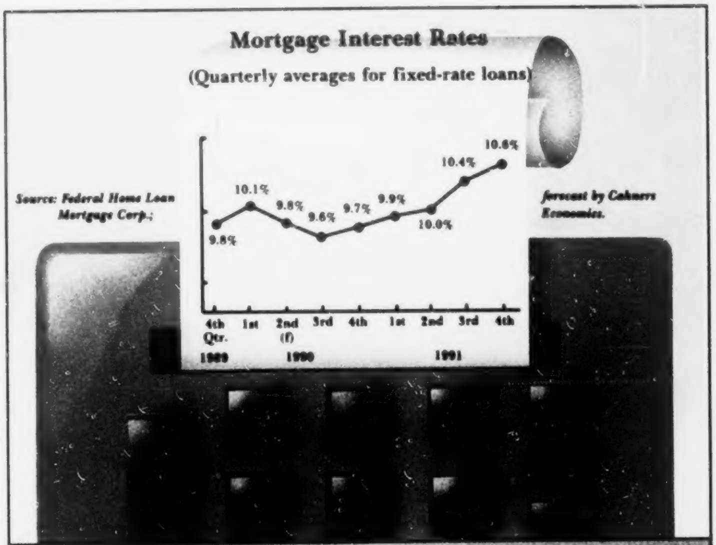
Commercial reconstruction opportunities will continue to outdistance opportunities for new construction—a fact that should benefit the smaller diversified contractor. Building permit values for non-residential reconstruction work were up 7 percent through the first several months of 1990, while permits for new commercial construction were down 6 percent.

Through the inevitable ups-and-downs of construction activity in the '90s, builders should not lose sight of long-range trends that are affecting the market. Declining numbers of young households will almost surely result in the lowest volume of new residential construction since the (pre-baby boomer) 1960s when annual starts averaged 1.41 million units.

The homes built during the next decade will be larger, of higher quality, and increasingly geared towards the affluent trade-up buyer.

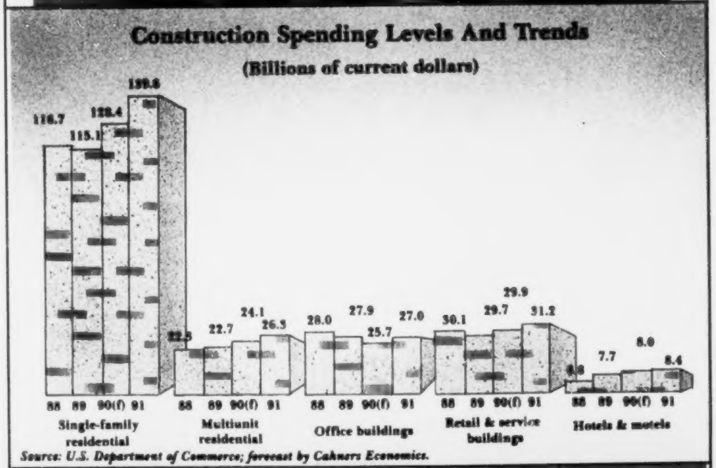
Finally, the remodeling market, which took an ever-increasing share of total residential construction dollars during the 1980s, will present even better opportunities in the new decade. For the decade as a whole, residential upkeep and improvement spending will probably equal or exceed new residential construction spending.

Better days are ahead, despite the slow recovery evidenced so far this year. Interest rates will fall modestly, and we will see improvement in both the new construction and remodeling markets this year with carry over into 1991. □


Mortgage Interest Rates

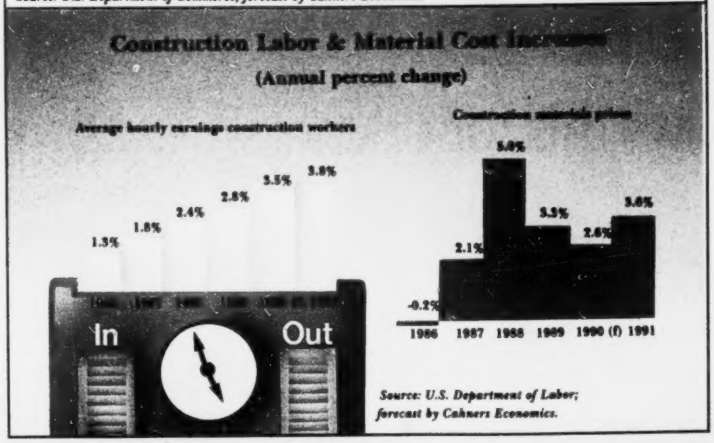
(Quarterly averages for fixed-rate loans)

Source: Federal Home Loan Mortgage Corp.; forecast by Cahners Economics.


Construction Spending Levels And Trends

(Billions of current dollars)

Source: U.S. Department of Commerce; forecast by Cahners Economics.


Construction Labor & Material Cost Increases

(Annual percent change)

Source: U.S. Department of Labor; forecast by Cahners Economics.

NAHB Goes To War Over AD&C Funding

Survey shows more than half of all builders will alter building plans this year as credit tightens.

By Wayne A. Endicott, Senior Editor

Armed with a survey, which shows that more than half of its members have altered building and development plans this year as a direct result of the Financial Institutions Reform, Recovery and Enforcement Act (FIRREA), the National Association of Home Builders (NAHB) is pleading its cause to anyone who will listen.

The survey reveals that FIRREA has already changed lending patterns, not only among thrift institutions, with whom it deals directly, but among commercial banks as well. The commercial banks have apparently also responded to a directive issued last Feb. 8 by David L. Clarke, Comptroller of the Currency, which urged caution in lending practices and has them looking nervously over their shoulders.

The NAHB survey reveals that 60 percent of builders have altered 1990 building plans. Their responses range from reduced numbers of housing units (or even no starts at all) to reduced numbers of lots under development, delays in land development and starts, layoffs and more caution on new projects. Some even reported that they were practically out of business.

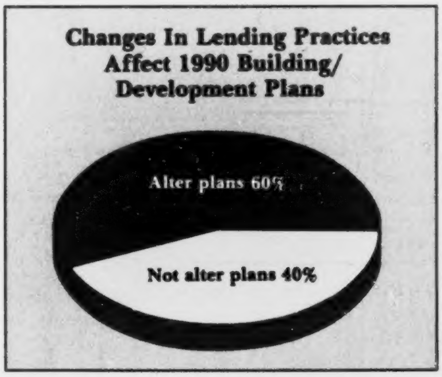
One result has been to send builders scrambling in search of new financing sources for acquisition, development and construction. More than 70 percent of the respondents have tried to make other arrangements for financing for acquisition and development, and 66 percent are seeking new sources for construction funds. About one-third have been successful in finding new funds for acquisition and more than 40 percent for construction.

The survey also reveals that the impact has been felt the hardest in the Northeast, where nearly 70 percent of builders have altered 1990 building plans. Other regional figures show: Midwest, 41 percent change plans; West, 54 percent; South, 66 percent.

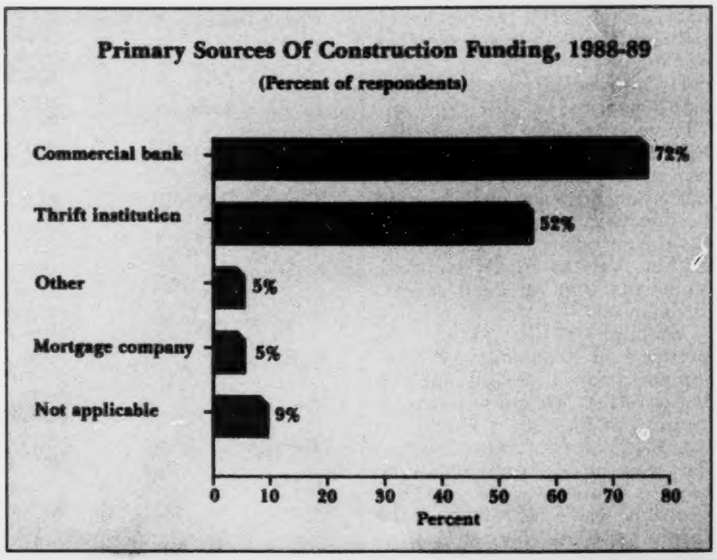
In a somewhat surprising note, large volume builders reported altered AD&C plans to a greater extent (68 percent) than small volume builders (only 52 percent).

With the results of the survey firmly in hand, NAHB has stepped up its campaign to find someone—Congress, the Bush administration or the regulators—who will take steps to avoid what they fear will

Continued on page 28



More than half of all builders surveyed said that changes in lending practices were forcing them to alter their building and development plans. In some cases, they have even chosen to start no new homes or delay land development, left. Commercial banks and thrifts historically have provided most builders with AD&C financing, below.



Crunch spreading to other businesses

Continued from page 27

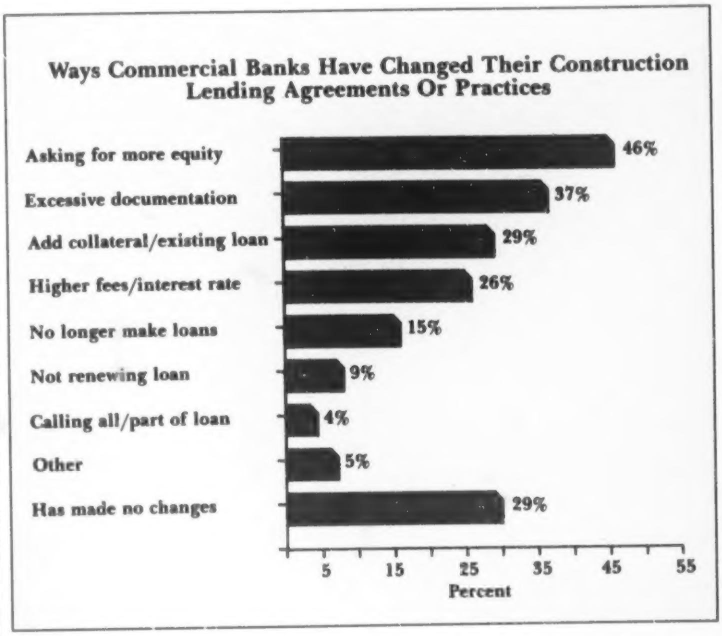
become a "regulatory" recession. Martin Perlman, NAHB president, told *PB*, "We are in a high pressure, hardball game here. As far as the unintended impact of the FIRREA legislation *vis-à-vis* the loans-to-one-borrower provision, the grandfathering of existing loans and the 30 percent exemption for thrifts with fully phased-in capital, everybody agrees that there should be a transition period, but nobody appears willing to act."

Perlman dismissed the impact of a recent press conference during the American Banking Association convention where Clarke, Federal Reserve Board chairman Alan Greenspan, and William Seidman, chairman of the Federal Deposit Insurance Corp. (who also heads the Resolution Trust Corporation), insisted that banks should not let the current situation frighten them out of the loan business. Perlman points out that since that press conference, none of the three has done anything to ease the situation, although Greenspan has been quoted as saying there is incontrovertible evidence that a credit crunch is developing.

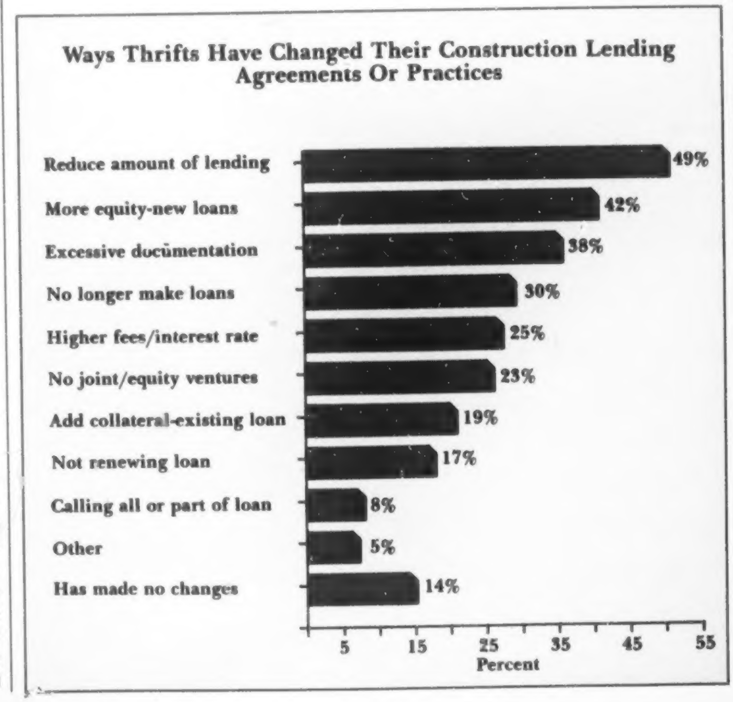
What then, can NAHB do? "We'll just keep plugging away, trying to get someone to listen," Perlman says. He revealed that NAHB has prepared a briefing book on the results of the survey to be distributed to every member of Congress.

He also called for other interested parties to join the fray. "There is growing evidence that FIRREA is now affecting not only our industry's ability to borrow, but other small- and medium-sized businesses as well. We hope to enlist their support and perhaps together, we can finally convince somebody that we need relief," Perlman said.

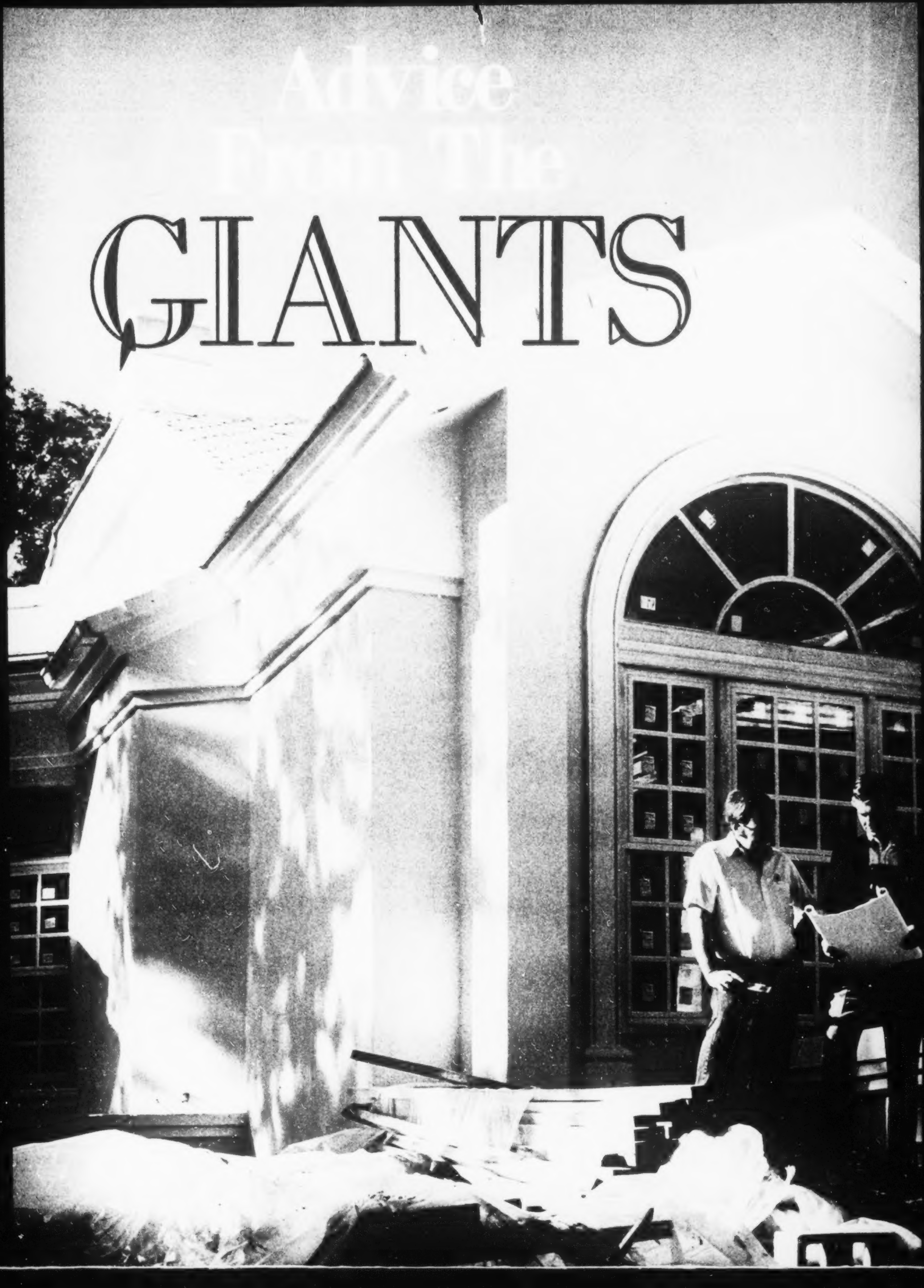
Michael Carliner, staff vice president for economics and housing policy for NAHB, summed up the problem: "We got into trouble because of imprudent lending in the first place. Now we have to deal with the overreaction of some bank examiners who know they probably won't be called on the carpet for being too cautious." □

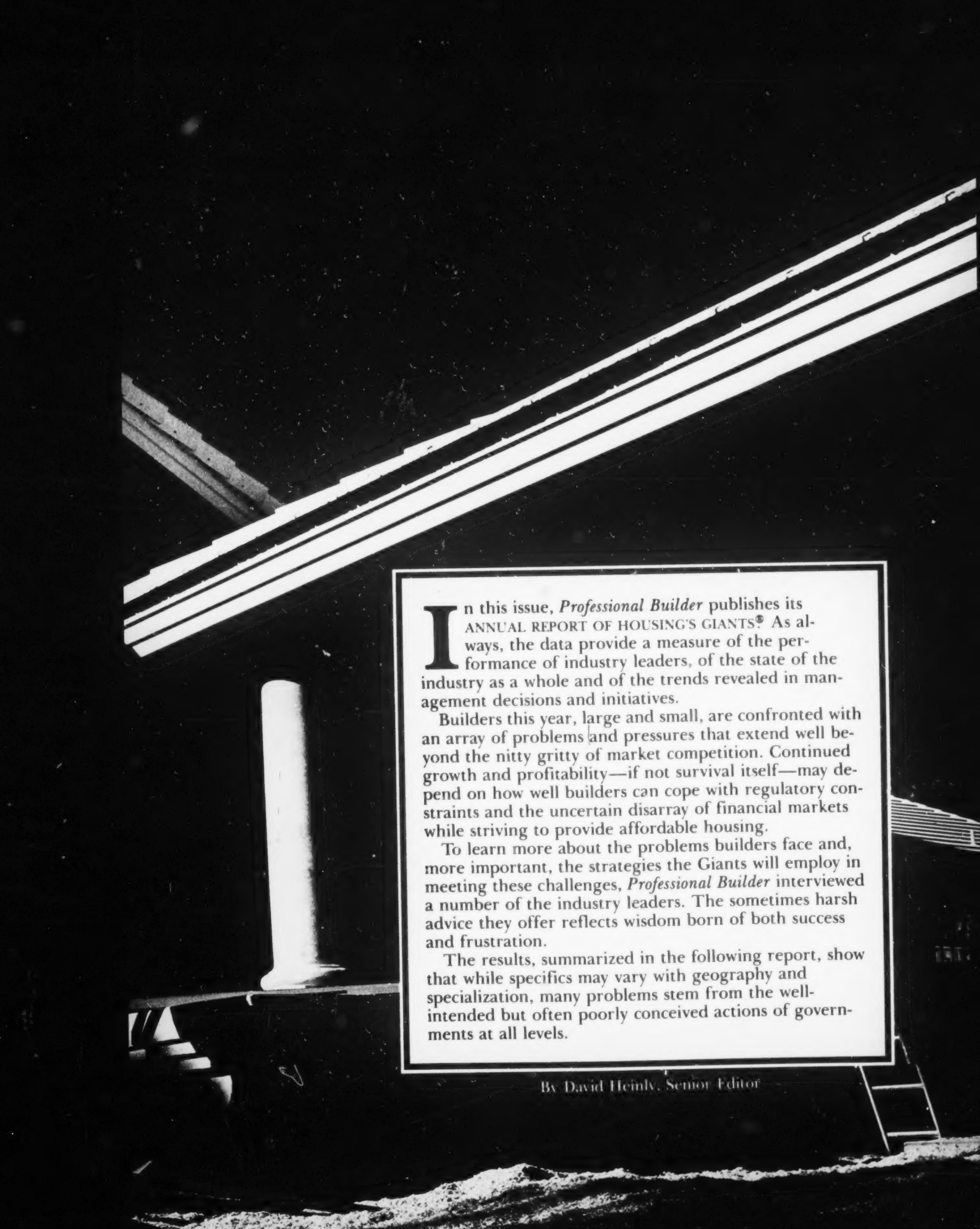

Ways Commercial Banks Have Changed Their Construction Lending Agreements Or Practices

Commercial banks are asking for more equity in construction loans and requiring excessive documentation, builders say, above. Meanwhile, builders report that thrifts are lowering the amounts they will lend for construction and in many cases are even refusing to make such loans.


Ways Thrifts Have Changed Their Construction Lending Agreements Or Practices

Advice From The GIANTS





In this issue, *Professional Builder* publishes its ANNUAL REPORT OF HOUSING'S GIANTS.® As always, the data provide a measure of the performance of industry leaders, of the state of the industry as a whole and of the trends revealed in management decisions and initiatives.

Builders this year, large and small, are confronted with an array of problems and pressures that extend well beyond the nitty gritty of market competition. Continued growth and profitability—if not survival itself—may depend on how well builders can cope with regulatory constraints and the uncertain disarray of financial markets while striving to provide affordable housing.

To learn more about the problems builders face and, more important, the strategies the Giants will employ in meeting these challenges, *Professional Builder* interviewed a number of the industry leaders. The sometimes harsh advice they offer reflects wisdom born of both success and frustration.

The results, summarized in the following report, show that while specifics may vary with geography and specialization, many problems stem from the well-intended but often poorly conceived actions of governments at all levels.

By David Heinly, Senior Editor

Few consider the S&L crisis their most serious problem, although 80 percent were affected by it.

Q: What do you see as the most important concerns facing home builders today, and what advice do you have for dealing with them?

More than half the Giants interviewed, 52.8 percent, rate restrictive zoning and no-growth moratoria as the industry's biggest headache today. Virtually all of the executives responding to this survey said that this problem is among their top three concerns.

One out of two builders cited the high cost of land as a key worry, followed closely by apprehension about the availability of developable properties. But while land acquisition difficulties are top concerns for many, a significant percentage also ranked impact and development fees and long permit approval procedures among the top problems.

In general, the Giants see little that can be done about skyrocketing land costs, and few could suggest any magic formula for countering the problem. Finding land is primarily a matter of looking "farther out," said Lawrence T. Perlmutter, president of Amrep Corp., New York, finding opportunities beyond the densely-populated urban centers, and trying to hold this fringe land until a market develops.

But, as other building executives point out, there is a limit to how far you can stretch commuting times and distances for potential buyers—most experts agree that one hour is considered tops.

Some Giants, sensing that a drop in inflationary expectations is on the horizon, counsel patience in hopes that land prices will level off. Others suggest that builders must attack the problem behind the problem. The executives argue that high land costs and land scarcity are often the result of restrictive growth and zoning edicts.

The sensible approach, as with other regulatory problems, is to get involved in the political process.

'Get involved in a pro-action fashion by proposing solutions to development problems.'

Lawrence D. Canarelli, president, American West Development

Effectively dealing with bureaucratic hassles such as restrictive zoning and codes, impact fees, growth moratoria and dilatory permit approval procedures means dealing with governments and politicians, many of the Giants pointed out.

But there's another side to the coin, many industry leaders say: educating the public as well as the politicians is the best tactic. "Get involved in a pro-action fashion," said Lawrence D. Canarelli, president of American West Development, Las Vegas, "by proposing solutions to local development problems."

"The building industry in each locale," said Forrest W. (Woody) Brehm, president of Brehm Communities, San Diego, "should set up a coalition with the business community to help local government find broad-based solutions to community problems rather than burdening builders and developers—and, therefore, homeowners—with large fees to try to solve existing facility shortages."

Educate the public, advised another California-based Giant, by actually itemizing the various impact fees imposed as part of the purchase agreement. "Lock it on the price of the house," he said, "and really show (buyers) the government costs."

On this particular point, most of the Giants are in strong agreement. "It is critically important to communicate to home buyers that we (builders) are not responsible for a good portion of the costs," said Sam Lozano, design chief for Community Construction Inc., Bakersfield, Calif., "so they can start to put pressure on their elected officials."

For builders faced with these types of governmental problems, several Giants agreed, it is also vitally important to join and participate in the lobbying efforts of their local home builders association.

Q: How much and in what way has the collapse of the thrift industry affected your operations? What advice would you give other builders for dealing with this problem?

Considering that this has been the single most heavily-publicized industry problem in the last 12 months, it was surprising that relatively few executives from the Giant home building companies saw the S&L crisis as one of their most serious problems. However, it is important to note that more than 80 percent said they were affected by it to one degree or another.

What's more, several key builders were emphatic in their opinion that the problem will get worse. What we're seeing now, as one Giant said, is "the tip of the iceberg."

Less than 20 percent of the Giants surveyed said the Financial Institutions Reform, Recovery and Enforcement Act (FIRREA) had not affected them in any way, although most of these executives indicated that their firms had little or no dependence on S&L financing.

(Equally surprising perhaps, and contrary to tradition, barely 25 percent of the Giant home builders considered that age-old irritant–high interest rates–as a major problem today. Of course, it may be that to builders, this problem simply pales in comparison to the headaches listed above.)

Several Giants even found a silver lining to FIRREA, arguing that the thrift crisis actually had a positive impact because "it has helped to eliminate some of the competitors."

Of course, others had a noticeably different view: "It stopped us in our tracks," said Michael T. Rose of Rose Associates, Laurel, Md. Others said that FIRREA and the thrift crisis has caused project delays, cancellations and, in some cases, outright defaults.

Many Giants reported the loss of most if not all their acquisition, development and construction (AD&C) financing as a result of new limits set by Congress on how much thrifts may loan to a single borrower.

A particularly controversial provision of last year's thrift bail-out bill mandates that no more than 5 percent of an S&L's lending capital may go to a single borrower. The enforcement of this provision has been one of the most disruptive aspects of FIRREA.

Now with S&L's effectively "out of the picture" as a primary lender, as one Giant suggested, builders either have had to seek out alternative sources of financing or hope their own liquidity would enable them to "wait out the storm" until the financial markets are stabilized.

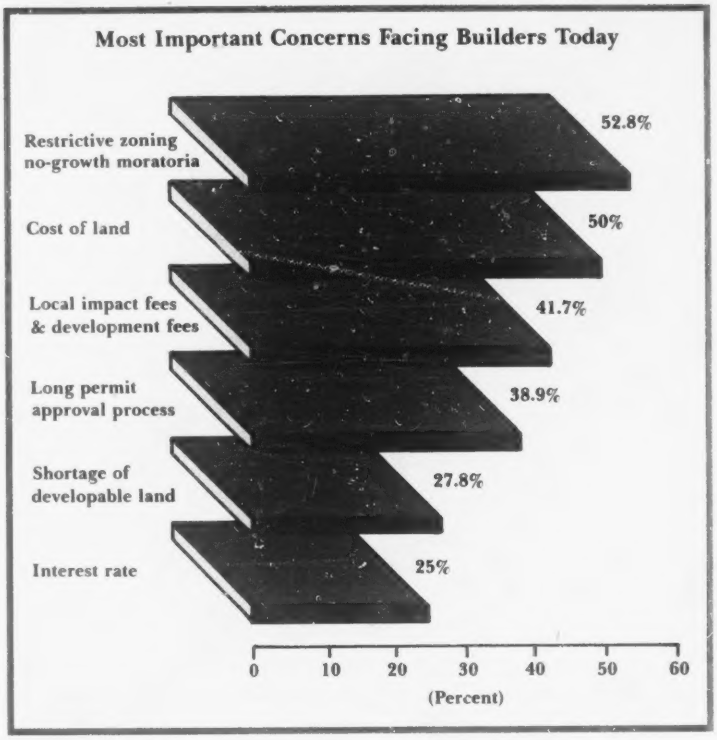
Virtually all the Giants agreed with Amrep's Perlmutter who advised fellow builders to seek out other sources of financing, from commercial banks to joint ventures to foreign sources. One Giant noted that he had roamed as far as Japan and Australia to secure his AD&C financing from investors in those countries.

"Get out and scramble," another said. "It is a question of quickly developing new relationships with a variety of contacts–lenders and landowners, mortgage companies, pension funds and insurance companies."

Executives from some Giant companies advised seeking out corporate investors and other "equity partners," while others suggested it may be profitable to "hook up with other builders."

A significant portion of the current problems builders are experiencing appear to stem from rules enacted in haste by Congress, and many Giants agreed with Rose's assertion that the industry may be facing what has been tagged a "regulatory recession" of unprecedented magnitude. In Rose's words, builders should "write to every Congressman," and to "contact all levels of elected officials to explain how we're creating, for the first time in history, a recession not due to interest rates but to direct government interference."

Some 60 percent of the Giants have turned to commercial banks for their AD&C financing. About 20 percent have found sources in entity joint ventures, and another 20 percent in pension funds. Foreign investors are providing financing for about 17 percent of the Giants in *PB*'s survey. Less than 14 percent are able to rely on their own financing subsidiary.


Most Important Concerns Facing Builders Today

Q: What advice can you offer smaller builders seeking alternatives to S&L financing?

'Set up coalitions to help local government solve existing facility shortages.'

**Forrest W. Brehm,
president,
Brehm Communities**

Some Giants see 1989 as the 'rock bottom' and expect better market conditions in 1990.

Most of the Giants agree the impact of the S&L collapse will be hardest on smaller builders.

Many suggest seeking equity capital from outside investors and forming joint ventures with other larger builders. "Find equity partners who have cash," advised Allen G. Zaring of Zaring National Corp., Cincinnati. "Don't try to borrow money. Try to build up enough equity out of your profits so that, in time, you don't have to borrow."

In some cases, other Giants said, builders should seek out good local banks who know the builder's reputation. Smaller local banks might be better disposed to a relationship with a small local builder, they suggest.

In any case, said Roger B. Gatewood, president, Westerfield Development, Gurnee, Ill., "they're going to have to work harder and pay a bit more than they're used to for financing."

Other Giants, however, painted a fairly grim picture. "It is a rough road for small builders," said a Northwest builder. "I don't know what to advise."

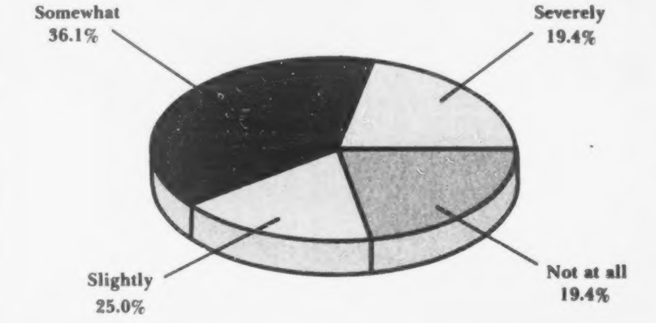
"Retire . . . get out of the business," said a San Diego-based Giant. "They (small builders) will never make it on their own." Yet another Giant suggested they get into custom home building for individual buyers.

Q: The availability of affordable housing, especially for first-time buyers, has become both an economic and political priority. How serious a problem is the shortage in your area?

Two-thirds of the Giants agreed the problem is very serious.

A significant portion—14 percent—said it's not a problem. For the most part, these were builders located in Georgia, Florida, parts of California and Ohio, or Giants who specialize in custom or retirement homes. However, the vast majority of builders—more than 80 percent—agree the problem is "somewhat" to "very serious" in most parts of the country.

Degree To Which The Collapse Of The Thrift Industry Has Affected Builder's Operations



Q: What advice can you give smaller builders seeking to provide affordable housing?

"Pray," said a Northeast Giant.

"Don't try it," advised another.

"Impossible in our market," said a California Giant.

"Small builders can't," said a mid-Atlantic Giant. "Try another business," urged Gatewood. And Zaring agreed "it's almost impossible for smaller builders."

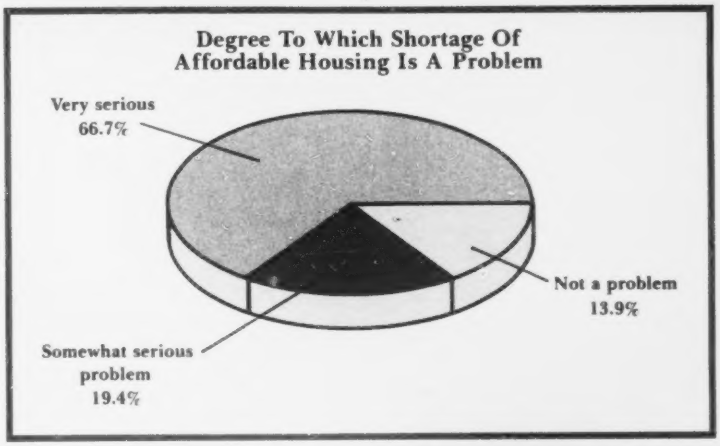
Not all Giants share these gloomy views, but most agree the task is daunting at best for smaller builders. Land costs and the regulatory constraints are considered too much for smaller builders to overcome without help from public agencies.

Some Giants suggest teaming up with larger builders, seeking areas that do not have strong growth controls, working with local church and welfare groups and, most advised, trying to work out public assistance programs and cooperation through local redevelopment agencies.

'Small builders are going to have to work harder and pay a little bit more than they're used to for financing.'

Roger B. Gatewood, president, Westerfield Development

Keeping costs low is vital, the Giants say. Several advise a look at modular and factory-built units as possible affordable alternatives for low-income buyers. Others suggested downsizing and higher densities (two floors instead of three, for example) and seeking the lowest prices on materials.



Degree To Which Shortage Of Affordable Housing Is A Problem

'To counter high land costs, try to hold fringe parcels until a market develops.'

**Lawrence T. Perlmutter,
president,
Amrep Corp.**

Q: What sales motivation/promotion programs work best in your area?

The Giants' experience and, therefore, their advice varied on this question. Many, viewing price as perhaps the most important factor in many of today's intensely competitive markets, advise some sort of price concession through outright discounts, rate buydowns and promotional appliance giveaways. Other Giants take a different view. Product scarcity, said one Giant, is a major incentive in his market, coupled with good design, good location and good financing.

"For the builders who suggested reducing the sales price, I recommend they seek another profession," said Rose, noting that profit margins are far lower than the public may think.

Several builders said they rely on so-called guaranteed resale programs with the builder guaranteeing to sell a buyer's existing home as an inducement.

"If no one buys the house (from us) within a period of time," he said, "we have a group of investors buy it."

The most favored ad media, by nearly 40 percent of the Giants, remains the Sunday newspaper supplements. Advertising in real estate sections of daily newspapers is favored by about 20 percent of the Giants.

Q: What is the outlook for your market and your company for the rest of 1990?

Regional variations in market conditions and expectations are clearly evident in the Giants' responses.

A Giant in the Northeast expects a year worse than 1989, both for the market and his company. A sluggish economy facing deeper cuts in federal defense spending offers little hope for an upswing in 1990, he said.

Market forecasts are not much brighter in the mid-Atlantic area, particularly those with heavy concentrations of federal defense contracts (Virginia is said to have more such contracts than any other state) and the prospect of reduced spending.

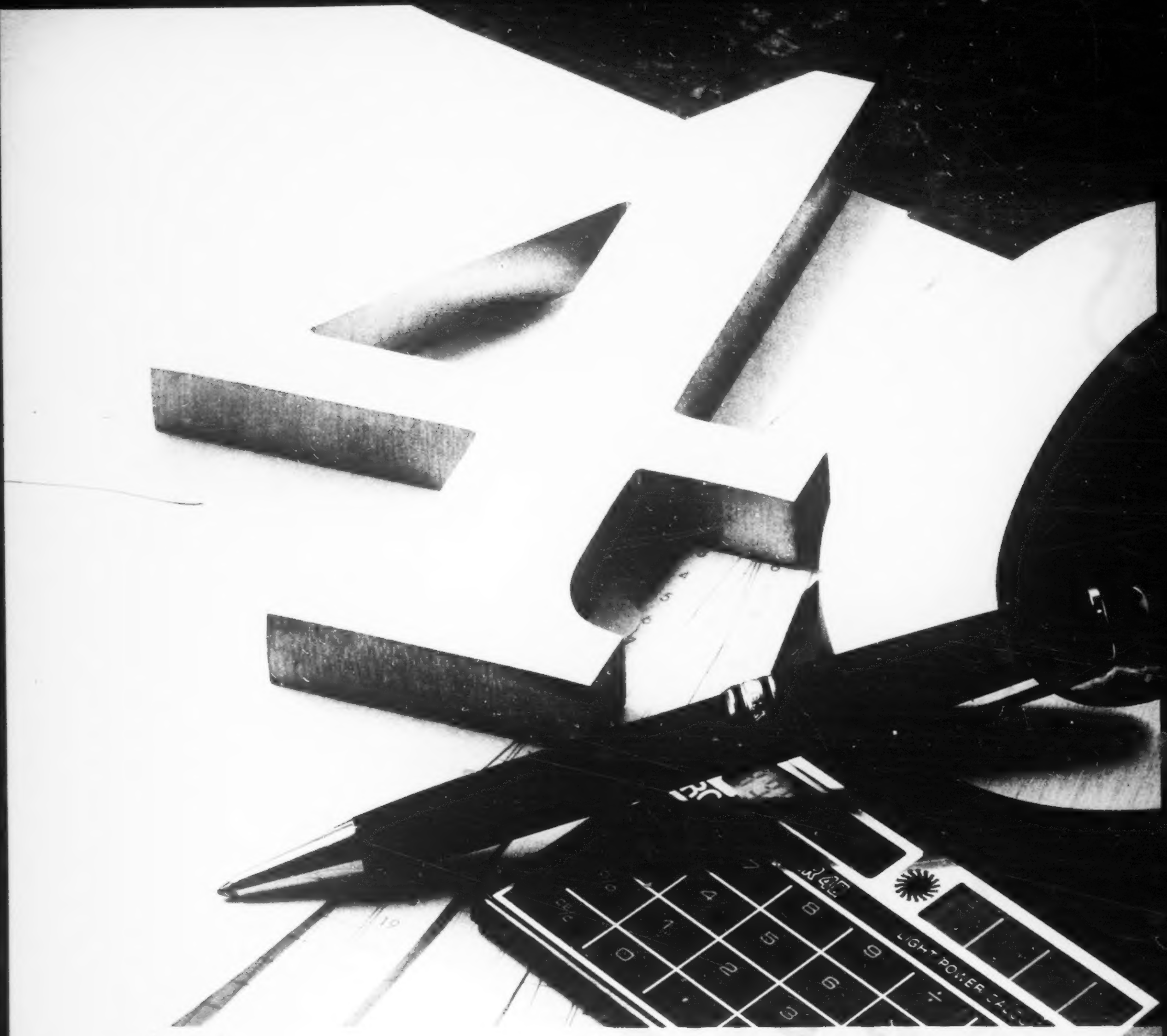
Some Giants, however, see 1989 as the "rock bottom" and look for better conditions in 1990, both for their market and their companies. Expectations appear most optimistic in the states of Pennsylvania, Virginia and Georgia.

Continued strength in the retirement market drew an upbeat outlook from builders in parts of Georgia and Florida. Giants in Midwestern states expect both their markets and their companies to do either as well as last year or better. Growth and strong economic activity are predicted by Giants in Ohio, Wisconsin and parts of Illinois where building for the low end of the market appears to be flourishing.

California and the West Coast, on the other hand, are a mixed bag in Giants' expectations. Many see their market falling below 1989 levels, but their own companies doing better than last year. Some areas, with continued high job and population growth (such as Las Vegas), are expected to top 1989 in both market performance and builder activity. □

'Try to build up enough equity out of your profits so that in time you don't have to borrow.'

**Allen G. Zaring,
Zaring National Corp.**



23rd Annual Report

If 1989 was not the best of times for home builders, it was also far from the worst, especially for the Giant 400. Last year, the industry's top 400 builders turned out a total of 493,269 new homes, broken down as: 219,431 for-sale units; 109,113 apartment units; 26,849 modular, panelized and precut units; and 137,876 mobile homes.

Total 1989 revenues for the Giant 400 were $56.9 billion, down only slightly from the $57.1 billion posted in last year's report (covering 1988) and off less than $1 billion from the record $57.8 billion achieved in 1987. In terms of revenue, that's a fairly strong showing for an off year.

The Giant 400's overall share of market was up as well. The top 400 builders accounted for 25.8 percent of all conven-

0 Of Housing's Giants®

tional housing built in 1989 (up from 23.3 percent in 1988) and 69.6% of all mobile homes (up from 1988's figure of 68.6 percent).

The numbers were boosted by a particularly high representation of California-based builders. Over a third of this year's Giants hail from the Golden State, an area that in 1989 at least was still enjoying a real estate boom.

In addition, the houses the Giants are building are bigger and more expensive than ever before. In 1989, for example, the average Giant-built single-family detached home had 2218 square feet and sold for $158,500.

Apartment building turned up a bit as well for the Giants, although the overall apartment industry was down in '89. Revenues from apartment construction

THE 400

Trammell Crow Retains Industry Lead; Centex Continues Rising

	1990 Report	1989 Report	1988 Report	1987 Report	1986 Report
1.	Trammell Crow $2,921,000,000	Trammell Crow $3,018,500,000	Lincoln Property $2,504,049,000	Lincoln Property $2,233,218,000	Lincoln Property $2,164,319,000
2.	Centex Corp. $2,002,952,000	Lincoln Property Co. $2,126,997,000	Centex Corp. $1,460,061,000	Centex Corp. $1,303,897,000	Centex Corp $1,266,232,000
3.	Lincoln Property Co. $1,867,642,000	Centex Corp. $1,845,484,000	Trammell Crow $1,098,897,264	Trammell Crow $1,074,620,000	Trammell Crow $1,184,334,000
4.	William Lyon Co. $1,492,100,000	William Lyon Cos. $1,401,000,000	Weyerhaeuser $886,000,000	Weyerhaeuser $856,820,000	N.C.H.P. $970,967,000
5.	Ryland Group $1,400,000,000	NVR L.P. $1,321,275,000	NV Ryan $870,472,000	Pulte Home $840,714,000	U.S. Home Corp. $922,081,000
6.	Kaufman And Broad $1,322,511,000	Ryland Group $1,271,875,000	Ryland Group $847,932,000	U.S. Home $766,524,934	Weyerhaeuser $777,574,000
7.	NVR L.P. $1,294,389,000	PHM Corp. $1,179,164,000	William Lyon $821,000,000	M.D.C. Holdings $706,219,000	Pulte Home $773,280,000
8.	Weyerhaeuser Real Estate $975,000,000	Kaufman And Broad $903,399,000	M.D.C. Holdings $799,800,000	William Lyon $692,141,000	Oxford Dev. $708,000,000
9.	Watt Industries $735,000,000	M.D.C. Holdings $840,597,000	Pulte Home $793,600,000	Ryland Group $666,205,000	Ryan Homes $577,170,000
10.	Paragon Group Inc. $720,526,000	Weyerhaeuser Real Estate $819,000,000	U.S. Home $786,659,000	N.C.H.P. $652,062,000	Paragon Group $529,950,000

NVR, Trammell Crow, And Fleetwood Remain Leaders

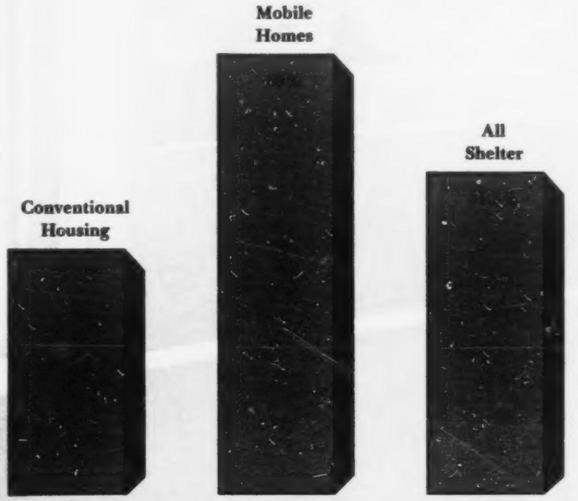
	For-sale housing	Rental housing	Mobile homes	Manufactured housing
1.	NVR L.P. $1,054,707,000 6069 units	Trammell Crow $646,000,000 10,939 units	Fleetwood Enterprises $532,900,000 34,760 units	Wausau Homes $80,000,000 3010 units
2.	Ryland Group $967,572,000 9215 units	Boston Capital Partners $360,000,000 7200 units	Redman Homes $316,520,000 15,875 units	Nanticoke Homes $67,232,377 1882 units
3.	William Lyon Co. $960,800,000 5196 units	Casden Co. $338,600,000 1849 units	Skyline Corp. $268,970,000 15,409 units	North American Housing $65,900,000 1040 units
4.	Centex Corp. $944,187,000 7372 units	Lincoln Property $253,539,000 2914 units	Champion Home Builders 38,384,000 12,197 units	Ryland Group $52,000,000 (est.) 7798 units
5.	Kaufman And Broad $935,015,000 5736 units	J.L. Construction $226,200,000 2476 units	Clayton Homes Inc. $146,613,000 9252 units	Lindal Cedar Homes $43,790,000 830 units
6.	Weyerhaeuser Real Estate Co. $706,000,000 6030 units	Oxford Development $200,000,000 1741 units	Palm Harbor Homes $136,972,085 5655 units	National Enterprises Inc. $39,441,000 3495 units
7.	PHM Corp. (Pulte) $701,859,000 5800 units	William Lyon Co. $190,960,000 1736 units	Schult Homes Corp. $115,473,102 5080 units	Patriot Homes Inc. $38,671,000 3134 units
8.	U.S. Home Corp. $609,834,000 5437 units	A.G. Spanos Construction $182,285,000 3341 units	Commodore Corp. $109,841,139 5749 units	Contempri Homes Inc. $38,154,220 1056 units
9.	Shapell Industries $554,595,000 1700 units	Summit Properties $176,842,000 2925 units	Horton Homes Inc. $102,000,000 5600 units	Ritz Craft Corp. of Pa. $36,000,000 1344 units
10.	WAH Industries $543,000,000 2370 units	Regis Homes $175,368,163 2346 units	Golden West Homes $80,000,000 2772 units	PLH Corp. $35,180,000 912 units

The Giant 400's Share Of Market Rises to 25.8%

The Giant 400 built and sold 355,393 conventional units and 137,876 mobile home units in 1989.

Year of Report	Conventional Housing	Mobile Homes	All Shelter
1978	19.1	86.8	27.3
1979	18.4	77.6	25.5
1980	20.8	82.2	29.2
1981	22.6	81.0	31.0
1982	22.8	82.1	32.6
1983	23.0	82.6	34.0
1984	21.3	75.4	29.3
1985	25.7	75.9	32.9
1986	27.9	69.2	33.8
1987	25.2	70.6	34.7
1988	24.6	73.7	30.7
1989	23.3	68.6	29.1
1990	25.8	69.6	31.3

Percentages for conventional housing are figured on previous year's total public and private housing starts. Mobile-home share of market is based on previous year's mobile-home shipments.



Fleetwood Built The Most Units—34,760 Mobile Homes

measured 12.5 percent of total revenues, up from 11.7 percent the previous year, but still down from the 13.8 percent figure posted in 1987.

That's a brief outline of *Professional Builder's* 23rd ANNUAL REPORT OF HOUSING'S GIANTS®, The Giant 400. *PB* first documented the nation's largest builders in 1968.

PB's ANNUAL REPORT OF HOUSING'S GIANTS® is a report of diversified building companies. Most builders, not just the Giant 400, are involved in multiple construction activities—including for-sale housing, apartment construction, remodeling, non-residential projects, factory building, high-rise construction, property management and financial services. This report counts all of those revenues.

In some cases, firms reported the market value or construction value of their non-res properties and apartments held in portfolio, not sold. Those values are included in total revenues.

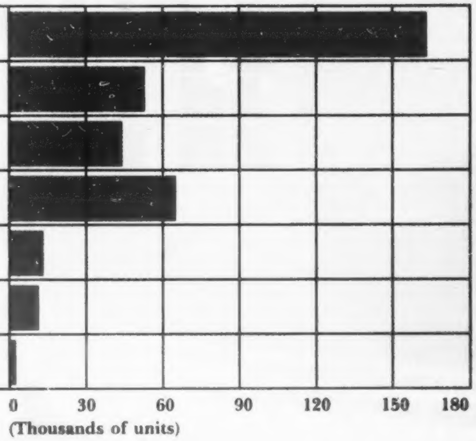
To compile this report, *Professional Builder* mailed surveys early this year to its database of large volume builders. The presidents or other key executives in the company completed and returned the questionnaire.

PB estimated the unit production, revenues or both of just a few builders it believed qualified for Giant status. Those estimates are clearly noted.

Apartment units put into service by the Giant 400 last year totaled 109,113—just 842 fewer than the 109,955 built in 1988. But apartment builders took two of the top three spots in this 1990 ANNUAL REPORT OF HOUSING'S GIANTS®. Dallas-based Trammell Crow Cos. tops the Giant 400 for the second year in a row, while last year's run-

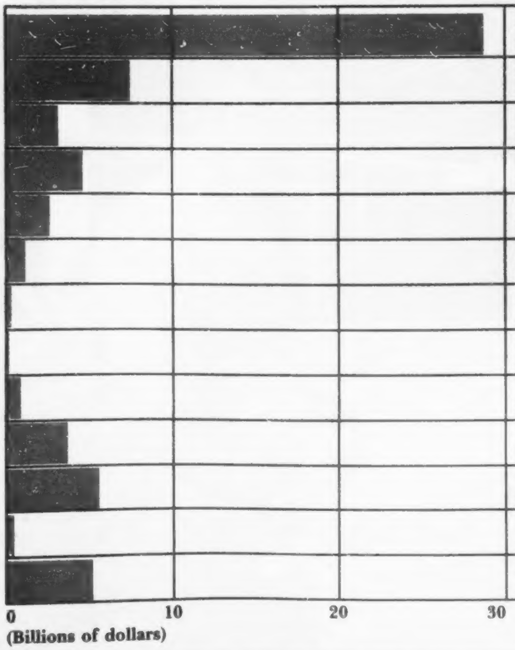
The Giant 400 Unit Production In 1989

Source	1989	1988
Single-family detached for sale 164,065 units	46.2%	44.8%
Single-family attached for sale 53,366 units	15.6	17.5
Low-rise apartments for own portfolio 44,044 units	12.4	12.3
Low-rise apartments for investors 65,069 units	18.3	19.5
Modular housing 13,162 units	3.7	3.3
Panelized housing 11,862 units	3.3	2.1
Precut housing 1,825 units	0.5	0.5
Total units	355,393	346,378



In addition, the Giant 400 manufactured 137,876 mobile homes in 1989 compared to 149,799 mobile homes manufactured in 1988.

How The Giant 400 Earned Their Revenues

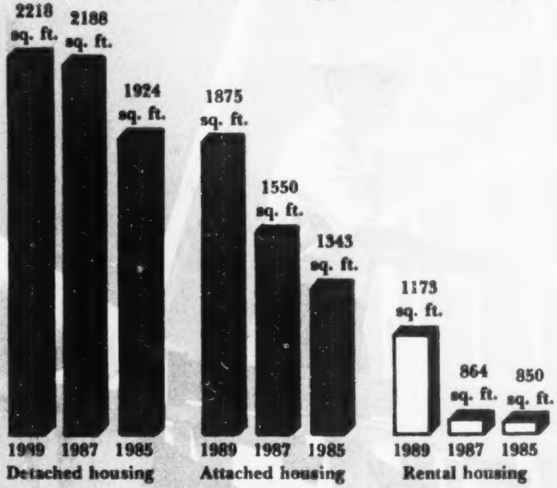


Source	1989	1988
Single-family detached for sale $26,015,844,000	45.7%	38.9%
Single-family attached for sale $6,856,060,000	12.0	12.2
Low-rise apartments for own portfolio $2,854,850,000	5.0	3.9
Low-rise apartments for investors $4,274,469,000	7.5	7.8
Mobile homes $2,541,804,000	4.5	4.7
Modular housing $415,579,000	0.7	0.7
Panelized housing $121,540,000	0.2	0.2
Precut housing $49,708,000	0.1	0.1
High-rise $339,849,000	0.6	0.9
Land sales $3,402,849,000	6.0	12.0
Non-res construction $5,268,000,000	9.0	7.5
Remodeling and rehabilitation $254,151,000	0.5	0.5
Other (rents, fees, interest) $4,625,229,000	8.2	10.6
Total revenues $56,866,074,000		

Average Price Of Giants' Homes Are On The Rise

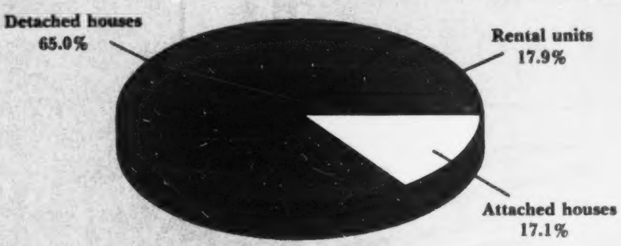
	1989	1988
Single-family detached	$158,500	$143,285
Single-family attached	123,800	115,285
Modular housing	31,575	34,535
Mobile homes	18,435	17,965
Rental (market value)	65,340	60,970

Giants' Houses Are Bigger, On Average



The Giants Are House Builders

Pie shows how housing revenues are split among the Giant 400. In 1989, detached housing increased its share from 62% in 1988. Increase came at the expense of rental housing, which accounted for 19.6% of revenues in 1988, and attached housing, which dropped from a 19.5% share in 1988.



California Builders Account For One Third Of Giant 400

ner-up, Lincoln Properties (also headquartered in Dallas) slipped to third position, being supplanted for the second spot by yet another Dallas firm, Centex Corp.

Because the rankings are based on revenues, not units, some builders that sold more units than the companies in the Giant 400 do not make the list.

By basing the ranks on revenues, Trammell Crow and Lincoln Property rank one and three, even though a substantial portion of their revenues came from nonresidential building.

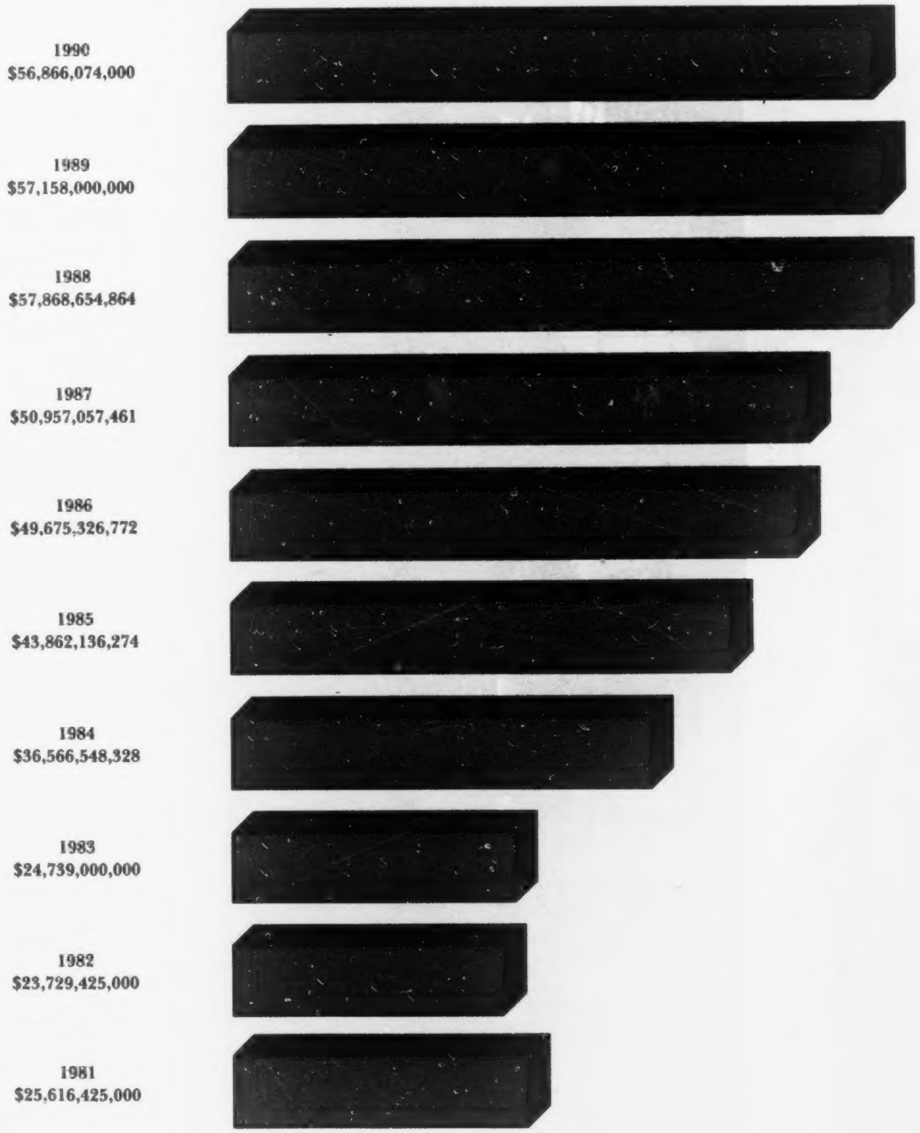
The following companies, in addition to number two ranked Centex, round out the top ten: William Lyon Co., Newport Beach, Calif.; Ryland Group, Columbia, Md.; Kaufman and Broad, Los Angeles; NVR L.P., Mclean, Va.; Weyerhaeuser Real Estate, Tacoma, Wash.; Watt Industries, Santa Monica, Calif. (a new entrant to the top 10, having ranked number 13 last year); and Paragon Group, Dallas (also new to the list, having ranked number 26 in 1989's report.)

The fastest-growing Giant, on a percentage basis, is Washington D.C.-based Bresler & Reiner, which grew 383 percent to $173,997,000 in revenues in calendar year 1989.

Los Angeles-based Kaufman and Broad posted the largest dollar increase, $419,112,000, on its way to achieving total 1989 revenues in excess of $1.3 billion.

Though the principal rankings are based on a company's total revenues for the year, *PB* also generates three other rankings: rank by total unit production; rank by for-sale housing units; and rank by rental housing units. (An alphabetical list of the Giants by their headquarter state is also provided, as is an alphabetized index of the 400 companies cross-referenced to

THE 400



Giant 400's Total Revenues From All Sources Equals $56.9 Billion
(Billions of dollars)

Year shown is the year of report. Beginning with 1987 report, PB limited the number of Giants to 400. From 1980 to 1986, Giants were those builders with annual revenues of at least $15 million.

1989 Revenues Of $1 Billion Or More Recorded By 7 Builders

their rank.)

Mobile home Giant Fleetwood Enterprises turned out the most new shelter units: 34,760. Ryland Group built the most for-sale housing: 9215 units in 1989. Trammell Crow tops the list of apartment builders with 10,939 units.

PB also ranks the top 10 builders by revenues in factory building (modular, panelized and precut homes) and mobile homes. Wausau Homes registered the largest revenues in factory-built housing, tallying $80 million from the sale of 3010 modular units. Fleetwood, the Giant 400 unit leader, also prevails as top mobile home Giant with revenues of $533 million from the production of 34,760 units.

The Giant 400 built more expensive housing last year. In 1988, the average single-family detached home built by the Giants cost $143,285; this year the figure is up to $158,500. Attached product was more expensive as well, costing $123,830 on average this year, compared to $115,285 a year earlier. Mobile home prices were up $470 to $18,435.

Revenues reported are for either the calendar year or fiscal year 1989. *PB*'s list is comprised primarily of builders of low-rise housing (four stories or fewer). Those firms that build solely high-rise housing are not included in these listings.

Revenues include sales which have been consummated or closed. Housing units are those that have been sold, not started. Joint venture or partnership activities are included on a pro rata basis.

Factory built housing revenues are for sales of units to builders, not the ultimate retail value of those units.

Following are rankings of the Giant 400 by units, headquarters states and revenues. □

Kaufman And Broad Showed The Largest Dollar Increase, But Bresler & Reiner Grew 383%

Builder	Increase 1988 to 1989	Total 1989 Revenues
1. Kaufman and Broad	$419,112,000	$1,322,511,000
2. Paragon Group	323,809,000	720,526,000
3. Oxford Development	246,000,000	488,000,000
4. Casden Co.	244,873,000	653,640,000
5. Centex	157,468,000	2,002,952,000
6. Weyerhaeuser Real Estate	156,000,000	975,000,000
7. Summit Properties	155,095,100	271,989,100
8. Ahmanson Developments	168,707,000	333,456,000
9. Fieldstone Co.	148,500,000	365,800,000
10. Pacific Scene	140,323,000	296,823,000

Builder	Percentage Increase 1988 to 1989	Total 1989 Revenues
1. Bresler & Reiner	383%	$173,397,000
2. Crowell Industries	308%	107,170,000
3. Lokey Cos.	197%	183,091,000
4. West Venture Development	182%	123,820,000
5. Duffel Fin. & Const.	167%	123,998,000
6. John Laing Homes	161%	117,693,000
7. Coleman Co.	151%	121,488,000
8. Summit Properties	132%	271,989,100
9. Dunmore Homes	110%	136,108,000
10. Kimball Hill	106%	160,108,000

THE 400

Mobile-Home Giant Fleetwood Produced Most Units; Ryland Follows With Mix Of For-Sale & Modular Units

RANK	COMPANY	TOTAL UNITS
1.	Fleetwood Enterprises	34760
2.	Ryland Group Inc.	17013
3.	Redman Homes	15905
4.	Skyline Corporation	15409
5.	Champion Home Builders Co.	12197
6.	Trammell Crow Res. Co.	11491
7.	Clayton Homes Inc.	9252
8.	Centex Corp.	7372
9.	NVR L.P.	7335
10.	Boston Capital Partners Inc.	7200
11.	William Lyon Co.	6932
12.	Weyerhaeuser Real Estate Co.	6270
13.	Horton Homes Inc.	5946
14.	PHM Corp. (Pulte)	5872
15.	Commodore Corp.	5749
16.	Kaufman and Broad Home Corp.	5736
17.	Palm Harbor Homes	5655
18.	U.S. Home Corp.	5437
19.	Schult Homes Corp.	5371
20.	Jim Walter Homes Inc.	5257
21.	Cavalier Homes Inc.	5002
22.	Patriot Homes Inc.	4303
23.	Lennar Corp.	4259
24.	Homes of Merit Inc.	3753
25.	Liberty Homes Inc.	3526
26.	Oakwood Homes Corp.	3497
27.	National Enterprises Inc.	3495
28.	Lewis Homes Group of Cos.	3406
29.	A.G. Spanos Construction	3341
30.	Hovnanian Enterprises Inc.	3319
31.	Wausau Homes Inc.	3010
32.	M.D.C. Holdings Inc.	3004
33.	Hunt Building Corp.	2933
34.	Summit Properties	2925
35.	Lincoln Property Co.	2914
36.	Golden West Homes	2858
37.	General Homes Corp.	2827
38.	Lokey Companies	2777
39.	Fuqua Homes Inc.	2764
40.	Guerdon Industries	2675
41.	JL Construction	2585
42.	Blazer Building	2583
43.	Primark Corp.	2500
44.	Thomas P. Harkins Inc.	2457
45.	UDC-Universal Dev.	2390
46.	Robert Randall Co.	2389
47.	Watt Industries Inc.	2370
48.	Anden Group	2349
49.	Regis Homes	2346
50.	Picerne Properties	2341
51.	Casdan Company	2157
52.	M/I Schottenstein Inc.	2060
53.	Newport Pacific Development	2047
54.	Robertson Homes	2020
55.	Shelter Canadian Holdings Ltd.	2000
56.	J.L. Mason Group Inc.	1982
57.	Edward Rose Building Ent.	1955
58.	North American Housing Corp.	1882
59.	Wick Building Systems	1848
60.	Morris General Building Co.	1834
61.	Calmark Development Corp.	1816
62.	Dominion Developments Inc.	1808
63.	Dunmore Homes Inc.	1768
64.	Post Properties Inc.	1750
65.	Oxford Development Corp.	1741
66.	Tompkins Heritage Homes	1728
67.	Ritz-Craft Corp. of Pa.	1708
68.	Shapell Industries	1700
69.	Woodcrest Development Inc.	1693
70.	San-T Development Corp.	1652
71.	Fogelman Properties	est. 1611
72.	Colson & Colson Constr.	1602
73.	Forecast Mortgage Corp.	1568
74.	Coscan Development Corp.	1560
75.	Lusk Co.	1550
76.	Bramalea California Inc.	1516
77.	Elliott Homes Inc.	1513
78.	Paragon Group Inc.	1490
79.	Standard Pacific L.P.	1443
80.	Del Webb Communities	1392
81.	George Wimpey Inc.	1380
82.	DiVosta & Company	1373
83.	Warmington Homes	1365
84.	Pacific Scene Inc.	1354
85.	Continental Homes Holding	1350
86.	Fieldstone Co.	1341
87.	Lexington Development Corp.	1330
88.	Amrep Corp.	1318
89.	Diversified Homes	1308
90.	Drees Co.	1303
91.	Embrey Associates Inc.	1292
92.	Wingfield Contruction	1279
93.	Cenvill Development Corp.	1254
94.	Griffin Homes	1249
95.	Barnett-Range Corp.	1236
96.	Epoch Properties Inc.	1234
97.	General Development Corp.	est. 1200
98.	Weekley Homes Inc.	1184
99.	Citation Builders	1182
100.	Ahmanson Developments Inc.	1180
101.	GBW Properties	1160
102.	Harold Moore Associates	1159
103.	Catalina Homes	1126
104.	Oriole Homes Corp.	1092
105.	LeCesse Corp.	1090
106.	Flournoy Construction	1060
107.	Contempri Homes Inc.	1056
108.	Shea Homes	1049
109.	Nanticoke Homes Inc.	1040
110.	Bozzuto & Associates	1026
111.	International American Homes	1019
112.	Holtzman & Silverman Const.	1014
112.	Prometheus Development Co.	1014
114.	Beazer Properties Inc.	1008
115.	McBail Co.	1002
116.	Linpro Company	999
117.	Mercedes Homes	998
118.	Bresler & Reiner Inc.	992
118.	Jacobsen Manufacturing	992
120.	Barratt American Inc.	989
121.	Calton Inc.	978
122.	Zaremba Development Co.	968
123.	Goldrich & Kest Industries	967
124.	Winncrest Homes	953
125.	Taylor Morley Simon Inc.	940
126.	Friendswood/Village Builders	915
127.	PLH Corp.	912
128.	Landstar Homes	907
129.	Van Daele Development	905
130.	McKellar Communities	903
131.	Arthur Rutenberg Corp.	877
132.	L.J. Hooker Homes	869
133.	Buie Corp.	852
134.	DeLuxe Homes of Pa.	843
134.	Evans Withycombe Inc.	843
135.	Artery Organization Inc.	839
136.	John Laing Homes Inc.	837
137.	Holly Corp.	834
138.	Lindal Cedar Homes Inc.	830
139.	Di Loreto Const.	824
140.	United Development Mgmt.	814
141.	Kaplan Organization	814
142.	Michael Andrew Group	809
143.	Hughes-Patwil Homes	796
144.	Condiotti Enterprises Inc.	794
145.	Newhall Land & Farming Co.	790
146.	Clark-Wayland-Tarver Inc.	787
147.	Rayco Inc. (Ellison Homes)	780
148.	J.M. Peters Co.	775
149.	Paragon Homes Inc.	769
150.	Continental Financial Corp.	767
151.	Washington Homes Inc.	766
152.	Home Capital Dev. Group	766
153.	Kimball Hill Inc.	755
154.	Amurcon Corp. of Virginia	750
155.	Miles Homes Inc.	est. 746
156.	Lycon Group	739
157.	Centron Cos.	736
158.	Pacesetter Homes Inc.	734
159.	Luckey Co.	727
160.	Levitt Corporation	724
160.	Emerald Homes L. P.	724
162.	Fairfield Communities Inc.	722
163.	Foreston Development Corp.	est. 700
164.	John M. Corcoran & Co.	693
165.	Crowell Industries Inc.	691
166.	Summerhill Development	680
167.	Mitchell Co.	679
168.	Toll Brothers Inc.	676
169.	Roberts Properties Inc.	673
170.	Covington Development Group	652
170.	Leisure Technology Inc.	652
172.	Estes Home Building	est. 642
173.	Coleman Homes Inc.	639
174.	Western National Properties	638
175.	Gulfstream Land & Dev. Corp.	630
176.	American West Development	624
177.	Altman Development	622
178.	Woodview Development Co.	620
179.	Hofmann Co.	607
180.	Sunrise Co.	602
181.	John Cooley Co.	600
182.	Weingarten Siegel Group	est. 590
183.	Lockwood Group	588
184.	Torino Construction Corp.	578
185.	Hylton Group	574
186.	Homestead Land Development	573
187.	Gentry Homes	560
188.	GlenFed Development Corp.	553
189.	Homestead Group Association	est. 550
190.	S&A Custom Built Homes	549
190.	Orange Blossom Hills Inc.	549
192.	Union Valley Corp.	542
193.	Town & Country Homes	538
194.	Community Construction Inc.	537
195.	Cambridge Homes Inc.	536
196.	Holiday Builders Inc.	532

RANK	COMPANY	TOTAL UNITS
197.	Premier Group Inc.	531
198.	Century Homes	529
199.	Hoffman Homes	528
200.	Kiutts Homes Inc.	526
201.	Engle Group Inc.	525
202.	Wallick Construction Co.	524
203.	Larwin Construction Co.	522
204.	Fryling Construction	510
205.	INCO Homes	509
206.	West Venture Development Co.	500
207.	Hills Developers Inc.	499
208.	John Wieland Homes	498
209.	Orleans Construction Corp.	497
209.	Kathryn Thompson Dev.	497
211.	Dividend Development Corp.	471
212.	Grupe Co.	468
212.	Oberer Development Co.	468
214.	Oceanic Properties Inc.	464
215.	Richmarr Construction Corp.	462
216.	ITT Community Homes	459
216.	Anastasi Construction Co.	459
218.	FPA Corp.	456
219.	Kopf Construction Corp.	454
220.	Douglas Allred Co.	444
221.	Cloverleaf Properties Inc.	440
222.	J.E. Jones Const. Co.	438
223.	A-M Homes	435
224.	James Lewis Corp.	431
225.	Borror Corporation	429
226.	Acacia Construction Inc.	426
227.	Zale Group	425
228.	Milton Co.	421
228.	Milburn Investments	421
230.	First Financial Group	414
230.	Forest City Enterprises	414
232.	Sexton Companies	410
232.	Signature Homes	410
234.	Sterling Homes Corp.	408
234.	RGC-RecreActions Group	408
234.	Akins Development Company	408
237.	Interstate General Co.	406
238.	Silver Cos.	402
239.	Fairfield Homes Inc.	401
240.	Century American	401
241.	Royce Homes Inc.	392
242.	Kettler Brothers Inc.	391
243.	Hillside Residential Inc.	390
243.	Jeffrey Tamkins Inc.	390
245.	Pasquinelli Construction Co.	384
246.	Brighton Homes	381
247.	E.M. Harris Bldg.	379
247.	James Schuler & Assoc.	379
249.	Fralin and Waldron Inc.	372
250.	McMillin Cos.	371
251.	Calprop Corp.	367
252.	Blackfield Hawaii Corp.	364
253.	Frank Robino Associates	360
254.	Stanley Martin Cos.	359
255.	New Fortis Corp.	355
256.	Republic Development Co.	353
257.	Robson Communities	349
258.	Homes by Dave Brown	345
258.	Charles Rutenberg Housing	345
260.	Sunland Communities	343
261.	Long Signature Homes	343
262.	Hearndon/Rosewell Cos.	341
263.	Meeker Development Co.	340
264.	Homestead Properties	333
265.	Pembroke Enterprises Inc.	328
266.	Wynne Building Corp.	325
268.	Cameo Homes	317
269.	Newmark Home Corp.	316
270.	Circle T Corp.	312
271.	Baldwin Co.	310
271.	Zaring National Corp.	310
273.	Mangano Company	309
274.	Cutler Group	307
275.	Iacobucci Organization	304
276.	Michaels Group	303
277.	Colony HomesLTD.	301
278.	Quaker Group Builders	301
279.	Stokes-Collins	300
279.	Homestead Development Co.	300
281.	Davidson Communities	297
281.	Custom Living Communities Inc.	297
283.	Bovis Brunning Homes	294
284.	Drake Homes	292
285.	Key Company	291
286.	Leader Enterprises Inc.	290
287.	Zicka Homes Inc.	289
288.	RWS Development Co.	287
289.	Friedman Homes	285
289.	Red Seal Development Corp.	285
289.	Westfield Development	285
292.	McBride & Son Enterprises	284
293.	Coventry Financial Inc.	281
294.	Doyle Wilson Homes	280
295.	Lan Ron Builders	278
296.	Cooper Communities Inc.	277
297.	Good Value Homes	276
298.	Broadmoor Homes	272
299.	JMC	270
300.	Sun City Center Corp.	266
301.	Pacifica Corp.	264
301.	Bennett & Compton Inc.	264
303.	R.B. McComic Inc.	262
304.	Estridge Cos.	260
305.	Realen Homes	259
305.	Costain Homes Inc.	259
307.	Tobin Co.	258
308.	Communities Const. Corp.	257
309.	JCC Enterprises	254
309.	Hal Porter Homes	254
311.	Crosswinds Communities	250
311.	Pennhill Co.	250
311.	Gigliotti Corporation	est. 250
314.	Ciotti Construction Co.	247
315.	Marrano/Marc Equity Co.	246
316.	Elam G. Stoltzfus Jr. Inc.	244
317.	Capital Homes Maryland, Inc.	243
318.	C.P. Morgan Co.	235
319.	Manning Co.	234
320.	Edward R. Carr & Assoc.	229
320.	All Valley Financial	229
322.	Braddock & Logan Associates	227
323.	Blitman Building Corp.	225
323.	Williamsburg Properties Inc.	225
325.	Grant Construction	222
326.	Christopher Cos.	220
326.	Henry Fischer Builder Inc.	220
328.	Van Metre Cos.	219
329.	D&S Development	217
330.	Kingsway Development Corp.	216
331.	Bradley Constr.	215
332.	Stonehedge Construction Co.	214
332.	Weston Development	214
334.	Parker Lancaster Corp.	212
334.	Miller and Smith Cos.	212
334.	LDM Development Inc.	212
337.	Amir Development Co.	210
337.	Mayer Homes	210
339.	California Homes Inc.	206
340.	Ryder Homes	205
340.	Habitat Co.	205
342.	Goodman Homes Inc.	204
343.	William L. Berry Co.	203
344.	Kettler Forlines Inc.	202
345.	Brehm Communities	201
346.	Holiday Organization Inc.	198
346.	Braemar Homes	198
348.	Fieber Group	197
349.	Signature Homes	194
349.	Shawntana	194
351.	Patt Organization	189
352.	Alden Company	186
353.	John B. Canuso Inc.	185
354.	Signature Properties	184
355.	Chrisdon Communities	182
356.	Whitecliff Co.	180
357.	Radnor Homes Inc.	179
357.	Roy E. Daly & Co.	178
359.	Channing Corporation	177
360.	Medici Inc.	176
361.	Graham Cos.	172
362.	Duffel Financial & Constr.	170
363.	California Community Builders	168
364.	Avatar Holdings Inc.	166
364.	Cayman Development	166
364.	Gregory Group	166
364.	Robert C. Gibbs Company	166
368.	Grayson Homes Inc.	165
369.	Reynolds Construction	163
370.	Foster Brothers Inc.	161
370.	DeLuca Enterprises Inc.	161
372.	Westway Construction Corp.	160
373.	Wooldridge Organization	156
374.	Hayden Co.	151
375.	Kennedy Homes Ltd.	146
376.	Frankel Enterprises	141
377.	C-I/Mitchell & Best Co.	133
378.	Raznick & Sons Inc.	130
379.	Sabatello Construction	128
379.	Trilex Properties	128
381.	M.J. Peterson Real Estate	116
382.	Joe Keim Builders Inc.	111
383.	Lowder Construction Co.	110
384.	J.P. Rhoades Dev.	109
385.	Michael T. Rose Associates	101
386.	Pinn Brothers Construction	100
387.	Rocky Gorge Communities	87
388.	Heritage Dev. Group	55
389.	Bush Development Corp.	50
389.	Arker Companies	50
391.	Garden State Land Group	47
391.	Value Group Inc.	47
393.	Weinstock Construction Corp.	42
394.	Trojan Properties Inc.	39
395.	Harshbarger Construction Corp.	28
396.	Olympia/York	20
397.	Crowell & Baker Const. Co.	18
398.	Planned Residential Comm.	13
399.	Dimcas Inc.	10
399.	Martin Selko Co.	10

THE 400

The Giant 400 By For-Sale Housing Production

RANK	COMPANY	UNITS
1.	Ryland Group Inc.	9215
2.	Centex Corp.	7372
3.	NVR L.P.	6069
4.	Weyerhaeuser Real Estate Co.	6030
5.	PHM Corp. (Pulte)	5800
6.	Kaufman and Broad Corp.	5736
7.	U.S. Home Corp.	5437
8.	Jim Walter Homes Inc.	5257
9.	Lyon (William) Co.	5196
10.	Lennar Corp.	4259
11.	Hovnanian Enterprises Inc.	3319
12.	M.D.C. Holdings Inc.	3004
13.	General Homes Corp.	2827
14.	Lewis Homes Group of Cos.	2478
15.	UDC-Universal Dev.	2390
16.	Anden Group	2349
17.	Watt Industries Inc.	2300
18.	Schottenstein (M/I) Inc.	2060
19.	Shapell Industries	1700
20.	Mason (J.L) Group Inc.	1615
21.	Coscan Development Corp.	1560
22.	Bramalea California Inc.	1516
23.	Elliott Homes Inc.	1513
24.	Hunt Building Corp.	1505
25.	Standard Pacific L.P.	1443
26.	Webb (Del) Communities	1392
27.	Wimpey (George) Inc.	1380
28.	DiVosta & Company	1373
29.	Warmington Homes	1365
30.	Continental Homes Holding	1350
31.	Lusk Co.	1342
32.	Fieldstone Co.	1341
33.	Lexington Development Corp.	1330
34.	Forecast Mortgage Corp.	1257
35.	Cenvill Development Corp.	1254
36.	Griffin Homes	1249
37.	Woodcrest Development Inc.	1243
38.	General Development Corp.	est. 1200
39.	Weekley Homes Inc.	1184
40.	Citation Builders	1182
41.	Ahmanson Developments Inc.	1180
42.	Catalina Homes	1126
43.	San-T Development Corp.	1091
44.	LeCesse Corp.	1090
45.	Flournoy Construction	1060
46.	Shea Homes	1049
47.	Tompkins Heritage Homes	1032
48.	International American Homes	1019
49.	Beazer Properties Inc.	1008
49.	Pacific Scene Inc.	1008
51.	Barratt American Inc.	989
52.	Calton Inc.	978
53.	Drees Co.	975
54.	Winncrest Homes	953
55.	Friendswood/Village Builders	915
56.	Landstar Homes	907
57.	McKellar Communities	903
58.	Oriole Homes Corp.	892
59.	Rutenberg (Arthur) Corp.	877
60.	Hooker (L.J.) Homes	869
61.	McBail Co.	854
62.	Laing (John) Homes Inc.	837
63.	Hughes-Patwil Homes	796
64.	Condiotti Enterprises Inc.	794
65.	Rayco Inc. (Ellison Homes)	780
66.	Peters (J.M.) Co.	775
67.	Dunmore Homes Inc.	773
68.	Amrep Corp.	770
69.	Paragon Homes Inc.	769
70.	Continental Financial Corp.	767
71.	Home Capital Dev. Group	766
72.	Washington Homes Inc.	766
73.	Kimball Hill Inc.	755
74.	Buie Corp.	752
75.	Miles Homes Inc.	est. 746
76.	Luckey Co.	727
77.	Emerald Homes L.P.	724
78.	Fairfield Communities Inc.	722
79.	Van Daele Development	705
80.	Toll Brothers Inc.	676
81.	Roberts Properties Inc.	673
82.	Michael Andrew Group	669
83.	Artery Organization Inc.	665
84.	Leisure Technology Inc.	652
85.	Estes Home Building	est. 642
86.	Coleman Homes Inc.	639
87.	Diversified Homes	634
88.	Gulfstream Land & Dev. Corp.	630
89.	Thomas P. Harkins Inc.	629
90.	American West Development	624
91.	Woodview Development Co.	620
92.	Hofmann Co.	607
93.	Sunrise Co.	602
94.	Di Loreto Const.	600
95.	Mercedes Homes	598
96.	Linpro Co.	595
97.	Weingarten Siegel Group Inc.	est. 590
98.	Covington Development Group	588
99.	Newhall Land & Farming Co.	574
100.	Homestead Land Development	573
101.	Calmark Development Corp.	569
102.	GlenFed Development Corp.	553
103.	Crow (Trammell) Res. Co.	552
104.	Orange Blossom Hills Inc.	549
104.	S&A Custom Built Homes Inc.	549
106.	Levitt Corporation	548
107.	Town & Country Homes	538
108.	Cambridge Homes Inc.	536
109.	Holiday Builders Inc.	532
110.	Premier Homes	531
111.	Century Homes	529
112.	Hoffman Homes	528
113.	Engle Group Inc.	525
114.	Union Valley Corp.	510
115.	Inco Homes	509
116.	West Venture Development Co.	500
117.	Wieland (John) Homes	498
118.	Orleans Construction Corp.	497
118.	Thompson (Kathryn) Dev.	497
120.	United Development Mgmt.	477
121.	Dividend Development Corp.	471
122.	Grupe Co.	468
123.	Oceanic Properties Inc.	464
124.	Newport Pacific Development	462
125.	ITT Community Homes	459
126.	Gentry Homes	448
127.	Jones (J.E.) Const. Co.	438
128.	A-M Homes	435
129.	Borror Corporation	429
129.	FPA Corp.	429
131.	Zale Group	425
132.	Milburn Investments	421
132.	Milton Co.	421
134.	First Financial Group	414
134.	Lokey Companies	414
136.	Taylor Morley Simon Inc.	413
137.	Hylton Group	412
137.	Larwin Construction Co.	410
139.	Signature Homes	410
140.	Akins Development Co.	408
140.	RGC-RecreActions Group	408
140.	Sterling Homes Corp.	408
143.	Pacesetter Homes Inc.	404
144.	Fairfield Homes Inc.	401
145.	Royce Homes Inc.	392
146.	Kettler Brothers Inc.	391
147.	Hillside Residential Inc.	390
148.	Pasquinelli Construction Co.	384
149	Brighton Homes	381
149.	James Lewis Corp.	381
151.	Schuler & Assoc. (James)	379
152.	McMillin Cos.	371
153.	Calprop Corp.	367
154.	Blackfield Hawaii Corp.	364
155.	Stanley Martin Cos. Inc.	359
156.	New Fortis Corp.	355
157.	Republic Development Co.	353
158.	Crosswinds Communities	350
159.	Goldrich & Kest Industries	349
159.	Robson Communities	349
161.	Charles Rutenberg Housing	345
161.	Crowell Industries Inc.	345
161.	Homes by Dave Brown	345
164.	Long Signature Homes	343
164.	Sunland Communities	343
166.	Meeker Development Co.	340
167.	Homestead Properties	333
168.	Hills Developers Inc.	329
169.	Wynne Building Corp.	325
170.	Richmarr Construction Corp.	322
171.	Barnett-Range Corp.	320
172.	Newmark Home Corp.	316
173.	Baldwin Co.	310
173.	Zaring National Corp.	310
175.	Mangano Co. Inc.	309
176.	Casden Co.	308
177.	Iacobucci Organization	304
178.	Michaels Group	303
179.	Interstate General Co.	302
180.	Colony Homes LTD.	301
180.	Quaker Group Builders	301
182.	Homestead Development Co.	300
182.	Stokes-Collins	300
184.	Community Construction Inc.	297
184.	Custom Living Communities Inc.	297
184.	Davidson Communities	297
187.	Bovis Brunning Homes	294
187.	Foreston Development Corp.	est. 294
189.	Key Co.	291
190.	Leader Enterprises Inc.	290
191.	RWS Development Co.	287
192.	Friedman Homes	285
192.	Westfield Dev.	285
194.	Coventry Financial Inc.	281
195.	Wilson (Doyle) Homes	280
196.	Mitchell Co.	279
197.	Cooper Communities Inc.	277
198.	Anastasi Construction Co. Inc.	276
198.	Good Value Homes	276
200.	Broadmoor Homes	272
201.	JMC	270
202.	Cutler Group	266
202.	Sun City Center Corp.	266
204.	Bennett & Compton Inc.	264
204.	Pacifica Corp.	264
206.	McComic (R.B.) Inc.	262
206.	Pembroke Enterprises Inc.	262
206.	Silver Cos.	262
209.	Estridge Cos.	260
210.	Costain Homes Inc.	259
210.	Realen Homes	259
212.	Tobin Co.	258
213.	Hal Porter Homes	254
213.	JCC Enterprises	254
213.	McBride & Son Enterprises	254
216.	Gigliotti Corp.	est. 250
216.	Pennhill Co.	250
218.	Ciotti Construction Co.	247
219.	Marrano/Marc Equity Co.	246
220.	Capital Homes Maryland	243
221.	Robino (Frank) Assoc.	240
222.	Drake Homes	238
223.	Morgan (CP) Co.	235
224.	Manning Co.	234
225.	All Valley Financial	229
225.	Carr (Edward R.) & Assoc.	229
227.	Braddock & Logan Assoc.	227
228.	Williamsburg Properties Inc.	225
229.	Grant Construction	222
230.	Christopher Cos.	220
230.	Fischer (Henry) Builder Inc.	220
232.	D&S Dev.	217
233.	Kingsway Development Corp.	216
234.	Van Metre Cos.	215
235.	LDM Development Inc.	212
235.	Miller and Smith Cos.	212
235.	Parker Lancaster Corp.	212
236.	Mayer Homes	210
237.	California Homes Inc.	206
237.	Stonehedge Construction Co.	206
239.	Ryder Homes	205
240.	Goodman Homes Inc.	204
241.	Berry (William L.) Co. Inc.	203
241.	Bresler & Reiner Inc.	203
243.	Kettler Forlines Inc.	202
244.	Brehm Communities	201
244.	Century American	201
246.	Kaplan Organization	200
247.	Holiday Organization Inc.	198
248.	Fieber Group	197
249.	Signature Homes	194
250.	Stoltzfus (Elam G.) Jr. Inc.	192
251.	Wallick Construction Co.	191
252.	Summerhill Dev.	190
253.	Patt Organization	189
254.	Alden Co.	186
255.	Canuso (John B.) Inc.	185
256.	Oberer Development Co.	184
257.	Signature Properties	184
258.	Chrisdon Communities	182
258.	Shawntana	182

RANK	COMPANY	UNITS
260.	Klutts Homes Inc.	180
260.	Whitecliff Co. Inc.	180
262.	Radnor Homes Inc.	178
262.	Roy E. Daly & Co.	178
264.	Channing Corp.	177
265.	Medici Inc.	176
266.	Cameo Homes	173
267.	Graham Cos.	172
268.	Duffel Financial & Constr. Co.	170
269.	California Community Builders	168
269.	Kopf Construction Corp.	168
271.	Avatar Holdings Inc.	166
271.	Cayman Dev.	166
271.	Gibbs (Robert C.) Co.	166
271.	Gregory Group	166
275.	Grayson Homes Inc.	165
275.	Hearndon/Rosewell Cos.	165
277.	Reynolds Construction	163
278.	Weston Dev.	162
279.	DeLuca Enterprises Inc.	161
279.	Foster Brothers Inc.	161
281.	Westway Construction Corp.	160
282.	Wooldridge Organization	156
283.	Holtzman & Silverman Const. Co.	154
284.	Hayden Co.	151
285.	Blitman Building Corp.	150
286.	Kennedy Homes Ltd.	146
287.	Frankel Enterprises	141
288.	Lan Ron Builders	135
289.	C-I/Mitchell & Best Co.	130
289.	Raznick & Sons Inc.	130
291.	Sabatello Construction	128
292.	Zicka Homes Inc.	127
293.	Harris (E.M.) Bldg.	117
293.	Moore (Harold) Associates Inc.	117
295.	Peterson (M.J.) Real Estate	116
296.	DeLuxe Homes of Pa. Inc.	114
297.	Keim (Joe) Builders Inc.	111
297.	Torino Construction Corp.	111
299.	Lowder Construction Co.	110
300.	JL Construction	109
300.	Rhoades (J.P.) Dev.	109
301.	Acacia Construction Inc	106
302.	Paragon Group Inc.	104
303.	Rose (Michael T.) Assoc.	101
304.	Pinn Brothers Construction	100
305.	Communities Const. Corp.	89
306.	Rocky Gorge Communities	87
307.	Amurcon Corp. of Virginia	84
308.	Red Seal Development Corp.	81
309.	Braemar Homes	72
310.	Wingfield Contruction	67
311.	Allred (Douglas) Co.	60
312.	Heritage Dev. Group Inc.	55
312.	Rose (Edward) Building Ent.	55
314.	Arker Cos.	50
314.	Bush Development Corp.	50
314.	Homestead Group Assoc.	est. 50
317.	Garden State Land Group	47
317.	Value Group Inc.	47
319.	Picerne Properties	46
320.	Weinstock Construction Corp.	42
321.	Trojan Properties Inc.	39
322.	Fralin and Waldron Inc.	38
323.	Evans Withycombe Inc.	35
324.	Habitat Co.	30
325.	Harshbarger Construction Corp.	28
326.	Lycon Group	22
327.	Olympia/York	20
328.	Crowell & Baker Const. Co.	18
329.	Holly Corp.	16
330.	Planned Residential Comm.	13
331.	Dimcas Inc.	10
331.	Selko (Martin) Co.	10
333.	Morris General Building Co.	7

(Excluding mobile homes and factory-built housing sold as for-sale units.)

The Giant 400 By Rental Housing Production

RANK	COMPANY	UNITS
1.	Crow (Trammell) Res. Co.	10939
2.	Boston Capital Partners Inc.	7200
3.	Spanos (A.G.) Construction Inc.	3341
4.	Summit Properties	2925
5.	Lincoln Property Co.	2914
6.	Blazer Building	2583
7.	Primark Corp.	2500
8.	JL Construction	2476
9.	Randall (Robert) Co.	2389
10.	Lokey Coms.	2363
11.	Regis Homes	2346
12.	Picerne Properties	2295
13.	Robertson Homes	2020
14.	Shelter Canadian Holdings LTD.	2000
15.	Rose (Edward) Building Ent.	1900
16.	Casden Co.	1849
17.	Thomas P. Harkins Inc.	1828
18.	Morris General Building Co.	1827
19.	Dominion Developments Inc.	1808
20.	Post Properties Inc.	1750
21.	Oxford Development Corp.	1741
22.	Lyon (William) Co.	1736
23.	Fogelman Properties	est. 1611
24.	Colson & Colson Constr. Co.	1602
25.	Newport Pacific Dev.	1585
26.	Hunt Building Corp.	1428
27.	Paragon Group Inc.	1366
28.	Embrey Investments Inc.	1292
29.	Calmark Development Corp.	1247
30.	Epoch Properties Inc.	1234
31.	Wingfield Contruction	1212
32.	GBW Properties	1160
33.	Moore (Harold) Associates Inc.	1042
34.	Bozzuto & Associates	1026
35.	Prometheus Development Co.	1014
36.	Zaremba Development Co.	968
37.	Lewis Homes Group of Cos.	928
38.	Barnett-Range Corp.	916
39.	Holtzman & Silverman Const. Co.	860
40.	Holly Corp.	818
41.	Evans Withycombe Inc.	808
42.	Bresler & Reiner Inc.	789
43.	Clark-Wayland-Tarver Inc.	787
44.	Centron Cos.	736
45.	Lycon Group	717
46.	Tompkins Heritage Homes	696
47.	Corcoran (John M.) & Co.	693
48.	Amurcon Corp. of Virginia	666
49.	Western National Properties	638
50.	Altman Development	622
51.	Goldrich & Kest Industries	618
52.	Cooley (John) Co.	600
53.	Lockwood Group	588
54.	Amrep Corp.	548
55.	San-T Development Corp.	561
56.	Taylor Morley Simon Inc.	527
57.	Fryling Construction	509
58.	Homestead Group Assoc.	est. 500
59.	Summerhill Development	490
60.	Torino Construction Corp.	467
61.	Woodcrest Development Inc.	450
62.	Cloverleaf Properties Inc.	440
63.	Forest City Enterprises Inc.	414
64.	Sexton Cos.	410
65.	Foreston Development Corp.	est. 406
66.	Linpro Co.	404
67.	Mitchell Co.	400
68.	Tamkins (Jeffrey) Inc.	390
69.	Allred (Douglas) Co.	384
70.	Mason (J.L) Group Inc.	367
71.	Crowell Industries Inc.	346
71.	Klutts Homes Inc.	346
71.	Pacific Scene inc.	346
74.	United Development Mgmt.	337
75.	Fralin and Waldron Inc.	334
76.	Wallick Construction Co.	333
77.	Pacesetter Homes Inc.	330
78.	Drees Co.	328
79.	Acacia Construction Inc.	320
80.	Circle T Corp.	312
81.	Forecast Mortgage Corp.	311
82.	Kopf Construction Corp.	286
83.	Oberer Development Co.	284
84.	Harris (E.M.) Bldg.	262
85.	Community Construction Inc.	240
85.	Weyerhaeuser Real Estate Co.	240
87.	Di Loreto Const.	224
88.	Newhall Land & Farming Co.	216
89.	Bradley Constr.	215
90.	Amir Development Co.	210
91.	Lusk Co.	208
92.	Red Seal Development Corp.	204
93.	Century American	200
93.	Oriole Homes Corp.	200
95.	Van Daele Development	200
96.	Anastasi Construction Co. Inc.	183
97.	Hearndon/Rosewell Cos.	176
97.	Levitt Corp.	176
99.	Habitat Co.	175
100.	Hills Developers Inc.	170
101.	Communities Const. Corp.	168
102.	Hylton Group	162
102.	Zicka Homes Inc.	162
104.	McBail Co.	148
105.	Cameo Homes	144
106.	Michael Andrew Group	140
106.	Richmarr Construction Corp.	140
106.	Silver Cos.	140
109.	Braemar Homes	126
110.	Robino (Frank) Associates	120
111.	Gentry Homes	112
111.	Larwin Construction Co.	112
113.	Interstate General Co.	104
114.	Buie Corp.	100
115.	Blitman Building Corp.	75
116.	PHM Corp. (Pulte)	72
117.	Pembroke Enterprises Inc.	66
118.	Covington Development Group	64
119.	Drake Homes	54
120.	Stoltzfus (Elam G.) Jr. Inc.	52
120.	Weston Development	52
122.	James Lewis Corp.	50
123.	Cutler Group	41
124.	Kaplan Organization	40
125.	McBride & Son Enterprises	30
126.	Artery Organization Inc.	15
127.	Shawntana	12
128.	Stonehedge Construction Co.	8

(Excluding mobile homes and factory-built housing sold as rentals.)

THE 400

Headquarter States: California Is Home To Most Giants

Note: Companies are not listed by size

ALABAMA

Lowder Construction Company
Mitchell Company

ARKANSAS

Cooper Communities Inc.
Fairfield Communities Inc.

ARIZONA

Clark-Wayland-Tarver Inc.
Continental Homes Holding
Coventry Financial Inc.
Emerald Homes L.P.
Estes Home Building
Evans Withycombe Inc.
Homes by Dave Brown
Sun Lakes Construction Co.
Tobin Company
UDC-Universal Development
Del Webb Communities

CALIFORNIA

A-M Homes
Acacia Construction Inc.
Ahmanson Developments Inc.
Akins Development Co.
Alden Company
All Valley Financial
Douglas Allred Company
Amir Development Co.
Anastasi Construction Co.
Anden Group
Baldwin Company
Barnett-Range Corp.
Barratt American Inc.
Bennett & Compton Inc.
Braddock & Logan Associates
Braemar Homes
Bramalea California Inc.
Brehm Communities
Brighton Homes
Broadmoor Homes
Buie Corp.
California Community Builders
California Homes Inc.
Calmark Development Corp.
Calprop Corp.
Cameo Homes
Casden Company
Cayman Development
Century American
Century Homes
Circle T Corp.
Citation Builders
Coleman Homes Inc.
Community Construction Inc.
Condiotti Enterprises Inc.
Costain Homes Inc.
Covington Development Group
Crowell Industries Inc.
D&S Development
Davidson Communities
Dividend Development Corp.
Drake Homes
Duffel Financial & Construction
Dunmore Homes
Elliott Homes Inc.
Fieldstone Company
First Financial Group
Fleetwood Enterprises
Forecast Mortgage Corp.
Friedman Homes
GBW Properties
Robert C. Gibbs Company
GlenFed Development Corp.
Golden West Homes
Goldrich & Kest Industries
Grant Construction
Gregory Group
Griffin Homes
Grupe Company
Guerdon Industries
Hal Porter Homes
Harshbarger Construction Corp.
Hillside Residential Inc.
Hofmann Company
Home Capital Dev Group
Homestead Development
Homestead Land Development
Homestead Group Association
Inco Homes
J.C.C. Enterprises
J.L. Construction
JMC (Mourier Construction)
Kaufman and Broad Home Corp.
Kingsway Development Corp.
John Laing Homes Inc.
Lan Ron Builders
Larwin Construction Co.
LDM Development Inc.
Leisure Technology Inc.
Lewis Homes Group of Cos.
Luckey Company
Lusk Company
Lycon Group
William Lyon Company
Mangano Company
Manning Company
McBail Company
R.B. McComic Inc.
McKellar Communities
McMillin Cos.
Medici Inc.
Meeker Development Co.
Michael Andrew Group
Morris General Building Company
Newhall Land & Farming Company
Newport Pacific Development
Pacesetter Homes Inc.
Pacific Scene Inc.
Pacifica Corp.
Paragon Homes Inc.
Pennhill Company
J.M. Peters Company
Pinn Brothers Construction
Premier Group Inc.
Prometheus Development Co.
Raznick & Sons Inc.
RecreActions Group
Regis Homes
Republic Manager
Reynolds Construction
J.P. Rhoades Development
Robertson Homes
Roy E. Daly & Company
Ryder Homes
San-T Development Corp.
Martin Selko Company
Shapell Industries
Shawntana
Shea Homes
Signature Homes
Signature Properties
A.G. Spanos Construction
Standard Pacific L.P.
Sterling Homes Corp.
Summerhill Development
Sunland Communities
Sunrise Company
Jeffery Tamkins Inc.
Kathryn Thompson Development
Torino Construction Corp.
Trilax Properties
Trojan Properties Inc.
Van Daele Development
Warmington Homes
Watt Industries Inc.
Weinstock Construction Corp.
West Venture Development Co.
Western National Properties
Weston Development
Whitecliff Company
George Wimpey Inc.
Winncrest Homes
Woodcrest Development Inc.
Woodview Development Co.

COLORADO

M.D.C. Holdings Inc.

CONNECTICUT

Heritage Development Group
Stone Gate Development

WASHINGTON D.C.

Bresler & Reiner Inc.
Richmarr Construction Corp.

DELAWARE

Nanticoke Homes Inc.
Frank Robino Associates

FLORIDA

Altman Development
Avatar Holdings Inc.
Bovis Brunning Homes
Bradley Construction
Catalina Homes
Cenvill Development Corp.
Channing Corporation
Chrisdon Communities
Dimcas Inc.
DiVosta & Company
DM Copeland & Sons
Engle Group Inc.
Epoch Properties Inc.
General Development Corp.
Graham Cos.
Gulfstream Land & Development Corp.
Holiday Builders Inc.
Homes of Merit Inc.
Homestead Properties
ITT Community Homes
Jacobsen Manufacturing
Landstar Homes
LeCesse Corp.
Lennar Corp.
Levitt Corporation
J.L. Mason Group Inc.
Mercedes Homes
Orange Blossom Hills Inc.
Oriole Homes Corp.
PGA National
Arthur Rutenberg Corp.
Rutenberg Construction
Sabatello Construction
Stokes-Collins
Sun City Center Corp.
Tompkins Heritage Homes
Jim Walter Homes Inc.
Wynne Building Corp.

GEORGIA

Beazer Properties Inc.
Colony Homes Ltd.
Continental Financial Corp.
Flournoy Construction

L.J. Hooker Homes
Horton Homes Inc.
Post Properties Inc.
Roberts Properties Inc.
John Wieland Homes

HAWAII

Blackfield Hawaii Corp.
Gentry Homes
Oceanic Properties Inc.
James Schuler & Associates

ILLINOIS

Cambridge Homes Inc.
Corley Real Estate Corp.
Habitat Company
Hoffman Homes
Joe Keim Builders Inc.
Kennedy Homes Ltd.
Kimball Hill Inc.
Lexington Development Corp.
Pasquinelli Construction Co.
Red Seal Development Corp.
RWS Development Co.
Town & Country Homes
United Development Mgmt.
Westfield Development
Westway Construction Corp.
Zale Group

INDIANA

Cloverleaf Properties Inc.
Commodore Corp.
Estridge Cos.
Liberty Homes Inc.
C.P. Morgan Company
National Enterprises Inc.
Patriot Homes Inc.
Schult Homes Corp.
Sexton Companies
Skyline Corp.

KENTUCKY

Henry Fischer Builder Inc.
Drees Company

MASSACHUSETTS

Boston Capital Partners Inc.
John M. Corcoran & Company

MARYLAND

Artery Organization Inc.
William L. Berry Company
Bozzuto & Associates
C-I/Mitchell & Best Company
Capital Homes Maryland
Crowell & Baker Construction Co.
Diversified Homes
Grayson Homes Inc.
Thomas P. Harkins Inc.
Interstate General Company
Kettler Brothers Inc.
Kettler Forlines Inc.
North American Housing Corp.
Oxford Development Corp.
Michael T. Rose Associates
Ryland Group Inc.
Washington Homes Inc.

MICHIGAN

Champion Home Builders Company
John Cooley Company
Crosswinds Communities
Fryling Construction
Holtzman & Silverman Construction Co.
PHM Corp. (Pulte)
Edward Rose Building Ent.

MINNESOTA

Good Value Homes
Miles Homes Inc.
Joseph M. Miller Construction

MISSOURI

E.M. Harris Bldg.
Hayden Company
J.E. Jones Construction Co.
Lockwood Group
Mayer Homes
McBride & Son Enterprises
Taylor Morley Simon Inc.

NORTH CAROLINA

Key Company
Klutts Homes
New Fortis Corp.
Oakwood Homes Corp.
Summit Properties

NEW JERSEY

Calton Inc.
John B. Canuso Inc.
Custom Living Communities Inc.
Garden State Land Group
Hovnanian Enterprises Inc.
International American Homes
Kaplan Organization
Planned Residential Comm.
Union Valley Corp.
Value Group Inc.
Weingarten Siegel Group Inc.

NEVADA

American West Development
Di Loreto Construction
Signature Homes

NEW YORK

Amrep Corp.
Arker Companies
Blitman Building Corp.
Foreston Development Corp.
Holiday Organization Inc.
Marrano/Marc Equity Company
Michaels Group
Olympia/York
M.J. Peterson Real Estate
Wiener Cos.

OHIO

Borror Corporation
Forest City Enterprises
Hills Developers
Kopf Construction Corp.
Oberer Development Co.
M/I Schottenstein Inc.
Wallick Construction Co.
Williamsburg Properties Inc.
Zaremba Development Co.
Zaring National Corp.
Zicka Homes Inc.

OREGON

Colson & Colson Construction Co
Robert Randall Company

PENNSYLVANIA

Ciotti Construction Co.
Contempri Homes Inc.
Cutler Group
DeLuca Enterprises Inc.
DeLuxe Homes of Pa.
FPA Corp.
Frankel Enterprises
Gigliotti Corporation
Hughes-Patwil Homes
Iacobucci Organization
James Lewis Corp.
Linpro Company
Orleans Construction Corp.
Patt Organization
PLH Corp.
Quaker Group Builders
Realen Homes
Ritz-Craft Corp. of Pa.
S&A Custom Built Homes Inc.
Elam G. Stoltzfus Jr. Inc.
Toll Brothers Inc.
Wooldridge Organization

RHODE ISLAND

Picerne Properties

SOUTH CAROLINA

Stonehedge Construction Co./The Mungo Co.
Wingfield Contruction

TENNESSEE

Clayton Homes Inc.
Fogelman Properties
Leader Enterprises Inc.
Harold Moore Associates
Radnor Homes Inc.

TEXAS

Blazer Building
Cavalier Homes Inc.
Centex Corp.
Trammell Crow Res. Co
Embrey Associates Inc.
Friendswood/Village Builders
Fuqua Homes Inc.
General Homes Corp.
Goodman Homes Inc.
Hunt Building Corp.
Lincoln Property Company
Lokey Companies
Milburn Investments
Newmark Home Corp.
Palm Harbor Homes
Paragon Group Inc.
Rayco Inc. (Ellison Homes)
Redman Homes
Royce Homes Inc.
U.S. Home Corp.
Weekley Homes Inc.
Doyle Wilson Homes

VIRGINIA

Amurcon Corp. of Virginia
Bush Development Corp.
Edward R. Carr & Associates
Christopher Cos.
Fairfield Homes Inc.
Foster Brothers Inc.
Fralin and Waldron Inc.
Hearndon/Rosewell Cos.
Hylton Enterprises (VA) Inc.
Long Signature Homes
Miller and Smith Cos.
Milton Company
NVR L.P.
Parker Lancaster Corp.
Pembroke Enterprises Inc.
Rocky Gorge Communities
Silver Cos.
Stanley Martin Cos.
Van Metre Cos.

WASHINGTON

Centron Cos.
Dominion Developments Inc.
Holly Corp.
Lindal Cedar Homes Inc.
Primark Corp.
Weyerhaeuser Real Estate Company

WISCONSIN

Wausau Homes Inc.
Wick Building Systems

CANADA

Shelter Canadian Holdings Ltd.
Coscan Development Corp.

Trammell Crow Heads List; Dallas Firms Hold Top 3 Spots

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
1 **$2,921,000**	1	**6** **11491 units**	**Trammell Crow Residential Co.** 2001 Ross Ave. Dallas, Texas 75201 Ronald Terwilliger	For calendar year 1989, this privately held company built and sold 9846 apartments for its own investment at a market value of $591,000,000. For investors, the company built 1093 apartment units for a sales volume of $55,000,000. In for-sale housing, Trammell Crow Residential built and sold 293 single-family detached homes for sales of $52,500,000 and 259 single-family attached units for $35,300,000. Non-residential construction accounted for $1,300,000,000. Rental income and management fees totaled $774,940,000 and land sales generated $20,400,000. Other income, which included contract building, came to $91,860,000. The company's single-family detached unit averages 2800 sq. ft. and sold for an average price of $150,000, while the attached unit averages 2000 sq. ft. with a price of $175,000. Rental units average 900 sq. ft. with monthly rents of about $600. The company is active across the country with most activity in the Southeast and Fla. (49%), Northwest (15%), Southwest (10%), Mid-Atlantic (9%), South Central (9%), Northeast (7%) and Midwest (1%).
2 **$2,002,952**	3	**8** **7372 units**	**Centex Corp.** 3333 Lee Parkway Dallas, Texas 75219 Laurence E. Hirsch	For calendar year 1989, this publicly held corporation, and subsidiaries Centex Real Estate Corp., Centex General Construction Cos., and Centex Development Co. L.P., built and sold 7068 single-family detached houses for $906,198,000 and 304 attached houses for $37,989,000. Sales volume for non-residential construction totaled $859,660,000. Other income, including construction products and savings and loan earnings, accounted for $199,105,000. Net income on total dollar volume was 3%. This national builder does 81% of its building in five states: Fla. (28%), Texas (26%), Calif. (12%), N.C. (8%) and Ill. (7%). The company is starting new activity in the California cities of Antelope Valley and San Clemente. Non-res construction activity consists of industrial plants/factories, office buildings, hotels/motels, medical buildings, airport terminals, symphony halls and prisons. The company subcontracted 81%-99% of construction activity.
3 **$1,867,642**	2	**35** **2914 units**	**Lincoln Property Co.** 500 N. Akard Dallas, Texas 75201 A. Mack Pogue	In calendar year 1989 this privately held company built 2914 apartment units for its own investment at a market value of $253,539,000. Non-residential construction accounted for $581,721,000, while rental income and management fees totaled $547,813,000. Other income, including building sales, was $476,844,000. Land sales accounted for another $7,725,000. The rental units average 750 sq. ft. with monthly rents about $500. The company is active in Calif. (29%), N.J. (15%), Wash. (15%), Pa. (13%), Mass. (12%), Conn. (10%) and Ill. (6%). The company currently has projects under way in Arbor, Pa.; Quincy, Mass.; Wayne, N.J.; Plant City, Fla.; Renton, Wash.; and Pittsburgh, among others. All construction work was subcontracted and more than 100 people work for the company.
4 **$1,492,100**	4	**11** **6932 units**	**William Lyon Co.** 4490 Von Karman Newport Beach, Calif. 92658 William Lyon	This privately held company in calendar year 1989 built and sold 4283 single-family detached homes for a sales volume of $837,935,000, and 913 single-family attached units for $122,865,000. In addition, the company built 1736 apartments for its own investment at a market value of $190,960,000. Non-residential construction accounted for $104,000,000. Land sales added $194,700,000. Rental income and management fees totaled $1,800,000. Interest and other income came to $39,840,000. The single-family detached units average 1800 sq. ft. and sold for about $210,000. The company is predominantly active in Calif. (90%), but other activity includes N.M. (3%), Ariz. (3%), Fla. (2%), and Ill. (1%). All construction activity was subcontracted in 1989.
5 **$1,400,000**	6	**2** **17013 units**	**Ryland Group Inc.** 10221 Wincopin Circle Columbia, Md. 21044 Charles E. Peck	For the fiscal year ended Dec. 31, 1989, this publicly-held corporation (NYSE) and subsidiaries Ryland Homes, Ryland Building Systems and M.J. Brock, built and sold 7193 single-family detached homes and 2022 single-family attached homes. The company also manufactured 5119 single-family panelized units, 1631 multi-family panelized units, 723 single-family modular units and 325 multi-family modular units. Total revenue for new homes built and manufactured equaled $1,019,572,000, the company reported. Other income included interest and mortgage fees for $382,512,000. The company does not produce non-residential buildings. In December 1989, the company left the Tampa, Fla., market, but is still active across the country. The company subcontracts 81%-99% of its work.

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
6 **$1,322,511**	8	**16** **5736 units**	**Kaufman and Broad Home Corp.** 10877 Wilshire Blvd. Los Angeles, Calif. 90024 Bruce Karatz	For fiscal year ended Nov. 30, 1989, this publicly held corporation (NYSE:KBH) built 4850 single-family detached units and 886 single-family attached units for a combined sales volume of $935,015,000. In addition, the company generated $288,164,000 from its non-residential construction activity. $57,300,000 of that non-res revenue is from an unconsolidated joint venture. Land sales accounted for $44,363,000 and the company's wholly owned mortgage banking subsidiary, Kaufman and Broad Mortgage Co., generated $54,969,000. Net income was 6.15% of total dollar volume. The company's detached houses average 1833 sq. ft., while the attached units average 1622 sq. ft. Average price for both types of housing was $162,600. The company sells most of its product to young couples (35%) and families with children (35%). Singles (16%), empty-nesters (7%) and retirees (7%) make up the rest of the sales. In the U.S., 65% of the company's nine home building subsidiaries operate only in Calif. Abroad, 30% of the company's activity is in France and 5% in Canada. In California, the company is currently building in the Central Valley and Moreno/Perris Valley areas. In France, it is pursuing renovation opportunities in Paris. Non-res activity included office buildings in France only. The company subcontracts all its construction activity.
7 **$1,294,389**	5	**9** **7335 units**	**NVR L.P.** 7601 Lewinsville Rd. McLean, Va. 22102 Dwight C. Schar	For calendar year 1989, this publicly held corporation (AMEX), built 3425 single-family detached units for $717,876,000 and 2644 single-family detached units for sales of $336,831,000. The company manufactured and sold 1266 single-family panelized units for sales of $15,825,000. Land sales accounted for $35,102,000. Other income included $168,474,000 for interest income and mortgage banking fees; $12,735,000 for the sale of 2 partnership interests; and $7,546,000 for miscellaneous income. The company's single-family detached units average 2325 sq. ft. for an average price of $209,600. The attached units average 1433 sq. ft. for $138,100. Apartment condominium units average 961 sq. ft. with a pricetag of about $47,000. This national builder is active in N.Y., Ohio, Ind., Pa., Del., Md., Washington D.C., Va., N.C., Fla., and Calif. In March 1989, the company changed its name from NVRyan to NVR L.P. In August 1989, it purchased Zellner Housing Corp.
8 **$975,000**	10	**12** **6270 units**	**Weyerhaeuser Real Estate Co.** Building WRE2-2 Tacoma, Wash. 98477 C. Stephen Lewis	The 11 subsidiaries of the publicly owned Weyerhaeuser Co. (NYSE) of Tacoma, Wash., for fiscal year ended Dec. 25, 1989, built 5375 single-family detached units, 655 single-family attached units and 240 apartments (for its own investment) for a combined sales volume of $730,000,000. Non-residential construction for the company totaled $95,000,000. Revenue generated from other than new construction included: $77,000,000 for land development; $55,000,000 from land sales; and $18,000,000 from rental income and management fees. Average price for the single-family detached units was $141,000. The company's subsidiary operations build and develop in Calif. (25%), Washington D.C. (21%), Texas (18%), Nev. (11%), Fla. (9%), N.C. (7%), N.J. (6%), and Wash. (3%). In 1989, C. Stephen Lewis succeeded J.W. Creighton as president of Weyerhaeuser Real Estate Co. Creighton is now president of Weyerhaeuser Co. Non-residential activity consisted of office building construction in Coral Gables, Fla. The company subcontracts 81%-99% of its construction work.
9 **$735,000**	13	**47** **2370 units**	**Watt Industries Inc.** 2716 Ocean Park Blvd. Santa Monica, Calif. 90406 Raymond A. Watt	This privately held company in calendar year 1989 built and sold 1996 single-family detached homes and 374 single-family attached homes for a total of $543,000,000. In addition, land sales generated $76,000,000 for the company. Additional sources of income included rental income of $52,000,000, hotel operating income of $8,000,000, and interest income of $24,000,000. Financial services accounted for $10,000,000, while other income was $22,000,000. The company is active in Calif. (88%), Ariz. (8%) and Nev. (4%). In 1990, the company will have operations in Hawaii. Prices for units ranged from $60,000 to $3,000,000. Non-residential activity includes the construction of shopping centers, industrial plants/factories, office buildings and hotels. The company has about 885 employees and subcontracts 100% of its construction work.
10 **$720,526**	26	**78** **1490 units**	**Paragon Group Inc.** 7557 Rambler Road Dallas, Texas 75231 W. R. Cooper	For calendar year 1989, this privately held company built 1124 apartments for its own investment at a market value of $56,310,000. The company built and sold 104 single-family detached homes for $29,111,000 and 262 apartments for investors at sales of $10,269,000. Non-residential construction accounted for $166,890,000. Revenue from sources other than new construction includes land sales ($9,568,000), rental income and management fees ($338,954,000) and building and apartment sales ($109,424,000). The company's single-family detached units average 2215 sq. ft. and sold for an average price of $282,000. Apartments average 750 sq. ft. with monthly rents at $455. The company is active in 16 states, including Fla. (31%), Texas and Mo. (15% each), Calif. (11%), N.C. (6%), Ky. (5%), Ala., Ga., and Va. (3% each), S.C. (2%), and Ariz., Colo., Ill., Ind., Kan., and Utah (1% each). New activity includes single-family homes in Calif.; an industrial manufacturing and business center in Texas; a retail center in Va.; and rental apartments in Mo. and Fla. The company subcontracts 81%-99% of its work.
11 **$710,499**	7	**14** **5872 units**	**PHM Corp. (Pulte)** 33 Bloomfield Parkway Bloomfield Hills, Mich. 48013 James Grosfeld	For calendar year 1989, the company built and sold 4698 single-family detached homes, 1102 single-family attached homes and 72 apartments for investors. For these activities revenue totaled $710,499,000. The average price of a detached home was $128,000. The company is active in Fla., Ga., Ill., Md., Mich., Minn., N.C., Va., Ariz., Calif., Colo., and Texas. Activity in Minn. began in January 1990.
12 **$710,358**	9	**32** **3004 units**	**M.D.C. Holdings Inc.** 3600 S. Yosemite St. Denver, Colo. 80237 Larry A. Mizel	For fiscal year ended Dec. 31, 1989, this publicly held corporation (NYSE and PSE) built and sold (along with with Richmond American Homes, a 45%-owned affiliate) 3004 single-family detached homes for a sales volume of $509,591,000. Interest income came to $109,854,000. Land sales totaled $90,913,000. The single-family detached homes average 2100 sq. ft. and sold for an average price of $148,000. Families with children (62%) were the primary buyers, followed by young married couples (16%), singles (12%), empty-nesters (7%) and retirees (3%). All of its construction activity is subcontracted. All activity was in Colo.
13 **$706,495**	11	**68** **1700 units**	**Shapell Industries** 8383 Wilshire Blvd. Beverly Hills, Calif. 90211 Nathan Shapell	This privately held company, in calendar year 1989, built and sold 1034 single-family detached houses for a sales volume of $381,133,000. Company also built 666 single-family attached units for sales of $173,462,000. Non-residential construction totaled $42,599,000. Other than new construction, additional income came from rental income and management fees ($55,059,000), interest ($38,103,000), other ($15,754,000) and land sales ($385,000). The single-family detached homes average 2649 sq. ft. and sold for an average price of $399,250. The attached units average 1621 sq. ft. with a $231,520 price tag. The company builds only in Calif. New projects are underway in Thousand Oaks and San Ramon. Non-residential construction consisted of shopping centers and retail stores. The company subcontracts all of its construction activity.

THE 400

Anden Group moves into the Top 20; Oxford Development jumps 25 places

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
14 **$653,640**	23	51 2157 units	**Casden Company** 9090 Wilshire Blvd. Beverly Hills, Calif. 90211 Alan I. Casden	For calendar year 1989, this privately held company built and sold 284 single-family detached houses for sales of $95,040,000 and 24 single-family attached units for $15,000,000. In addition, the company built 1449 apartments for investors at a sales volume of $271,600,000. For its own investment, the company built 400 apartments with a market value of $67,000,000. Non-residential construction totaled $35,000,000. Additional income came from land sales of $15,000,000 and rental income and management fees of $155,000,000. The detached homes average 2500 sq. ft.; the attached homes average 2000 sq. ft.; and the rental apartments average 1000 sq. ft. Company builds in Calif. and Hawaii. In 1989, the firm changed its name from CoastFed Properties to Casden Company. It also bought Coast Savings & Loan. Non-residential construction was solely office buildings. The company subcontracts all of its work.
15 **$638,159**	12	18 5437 units	**U.S. Home Corp.** P.O. Box 2863 Houston, Texas 77252 Robert J. Strudler	For calendar year 1989, this publicly held corporation built and sold 3862 single-family detached units for a sales volume of $461,631,000. In addition, the company built and sold 1575 single-family attached units for $148,203,000. Land sales accounted for another $24,407,000. Other income was $3,916,000. Net income was 0.2% of total dollar volume. The majority of the company's activity is in Fla., with other operations in Calif., Ariz., Texas, Md., Minn., Nev., N.J., Colo., Va., and three other states. All of the company's work is subcontracted.
16 **$552,221**	21	48 2349 units	**Anden Group** 15260 Ventura Blvd., Sherman Oaks, Calif. 91403 Eugene Rosenfeld	For calendar year 1989, this privately held company built and sold 1645 single-family detached houses for sales of $311,701,000 and 704 single-family attached houses for $108,757,000. Non-residential construction accounted for $5,650,000 and land sales totaled $126,113,000. The detached houses average 1600 sq. ft. and sold for an average price of $189,000. The attached units average 1300 sq. ft. with an average price tag of $153,000. The majority of the company's activity is in Calif. (72%), followed by Ill. and Fla. (5%), N.J., Va. and Md. (2%) and Ariz. (1%). Eleven percent of the company's activity is conducted in France. Last year, 81%-99% of the company's activity was subcontracted.
17 **$540,780**	18	75 1550 units	**Lusk Co.** 17550 Gillette Ave. Irvine, Calif. 92713 John D. Lusk	For calendar year 1989, this privately held company and its subsidiary, Lusk Construction Co., built and sold 1103 single-family detached houses for a sales volume of $257,159,000. The company also built 239 single-family attached units for sales of $31,439,000 and 208 apartment units for investors with a market value of $19,760,000. Non-residential construction totaled $41,000,000 for the year and land sales contributed $52,530,000. Other than new construction, revenue came from rental income and management fees ($63,914,000) and interest, home furnishings and other income ($74,978,000). The company's detached houses average 2100 sq. ft. and sold for an average price of $325,000; attached units average 1200 sq. ft. for $150,000; apartment condominiums average 950 sq. ft. for $93,000; and rental apartments average 815 sq. ft. for monthly rents of $570. Unit sales were split evenly between young married couples and families with children (30%) each; the remaining sales go to empty-nesters and retirees (15% each) and singles (10%). The company builds mostly in Calif. (97%), with the remaining 3% in Hawaii. Non-residential construction consisted of office buildings, warehouses/maintenance buildings, restaurants, recreational buildings and a country club. The company subcontracts 81%-99% of construction activity.
18 **$532,900**	14	1 34760 units	**Fleetwood Enterprises** P.O. Box 7638 Riverside, Calif. 92523 Glenn F. Kummer	For fiscal year ended April 29, 1990, this publicly held corporation (NYSE) manufactured and sold 34,760 mobile homes for sales of $532,900,000. Non-housing revenue totaled $1,017,000,000, which includes recreational vehicle sales and revenue from the company's finance and supply subsidiaries.
19 **$521,705**	15	28 3406 units	**Lewis Homes Group of Cos.** P.O. Box 670 Upland, Calif. 91785 Ralph M. and Goldy S. Lewis	For calendar year 1989, this privately held company built and sold 2108 single-family detached homes for a sales volume of $316,188,424 and 370 single-family attached homes for sales of $50,008,106. For its own investment, the company built 928 apartment units with a market value of $70,629,500. Non-residential construction added an additional $30,525,000 with land sales accounting for $17,060,511. Supplementary revenue included $29,950,562 for rental income and management fees and $7,342,710 in other income. The company's detached houses average 1700 sq. ft. and sold for an average price of $150,000. The attached units average 1600 sq. ft. and sold for about $165,000. Condominium units average 1275 sq. ft. with a sales tag of $125,000. Rental apartments average 880 sq. ft. for monthly rents of $750. Active only in Calif. (70%) and Nev. (30%), the company sells 50% of product to families with children, 20% to young married couples, 15% to empty-nesters, 10% to singles and 5% to retirees. For 1990, the company plans on more joint ventures as a financial partner to smaller builders and as a builder partner with major financial institutions. Non-residential activity included shopping centers and retail stores. The company subcontracts 81%-99% of its construction activity.
20 **$498,000**	—	116 999 units	**Linpro Company** 200 Berwyn Park Berwyn, Pa. 19312 Eric Eichler	For calendar year 1989, this privately held company built 595 single-family attached houses for sales of $70,000,000. Also, the company built 404 apartments for its own investment at a market value of $28,000,000. Non-residential construction brought in $200,000,000 and land sales accounted for $25,000,000. Additional revenue included $150,000,000 for rental income and management fees, and $25,000,000 from contract building operations. The attached units average 1500 sq. ft. for an average sales price of $150,000. Condominiums average 800 sq. ft. for about $100,000. Apartments average 800 sq. ft. with monthly rents about $600. The company is active in N.J. (30%), Del., Fla., Va., and Md. (15% each), and Pa. (10%) Company subcontracts 81%-99% of its construction activity.
21 **$488,000**	46	65 1741 units	**Oxford Development Corp.** 7316 Wisconsin Ave. Bethesda, Md. 20814 Leo Zickler	This privately held company and its subsidiaries, Oxford Development Enterprises and Oxford Retirement Services, built and sold 1741 apartments to investors for a sales volume of $200,000,000. Rental income and management fees totaled an additional $288,000,000. The apartments average 835 sq. ft. with monthly rents at about $600. The company works on a joint venture basis in selected markets across the country. It will continue to focus on restructuring and repositioning of real estate assets during 1990. Oxford also has programs designed to "enhance the lifestyle" of its buyers, in particular the Oxford Club and At Your Service campaign. The company subcontracts 81%-99% of its construction activity.
22 **$486,403**	17	79 1443 units	**Standard Pacific L.P.** 1565 W. MacArthur Costa Mesa, Calif. 92626 Ronald R. Foell	For calendar year 1989, this publicly held corporation (NYSE) built and sold 1443 single-family detached homes for a sales volume of $411,998,115. Revenue outside of new construction included $34,258,196 from land sales, $31,950,456 from manufacturing revenue and $8,196,200 in other revenue. Net income of total dollar volume was 21.8%. The single-family detached units average 2400 sq. ft. and sold for an average price of $306,568. The company builds only in Calif. (90%) and Texas (10%), with projects located in the metropolitan areas of San Diego, Los Angeles, San Francisco and Houston. All of the company's construction activity is subcontracted.

THE 400

Boston Capital built 7200 rental units; Fieldstone Company moves into the Top 30

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
23 **$467,663**	25	**23** **4259 units**	**Lennar Corp.** 700 N.W. 107th Ave. Miami, Fla. 33172 Leonard Miller	For fiscal year ended Nov. 30, 1989, this publicly held company (NYSE) built and sold 2469 single-family attached units for a sales volume of $189,291,000 and 1790 single-family detached units for sales of $185,256,000. The diversified company had $1,298,000 in remodeling revenue and $759,000 from non-residential construction. Additional revenue came from land sales of $6,560,000; rental income and management fees of $17,064,000; financial services totaling $46,407,000; interest income of $7,112,000; hotel revenues of $4,842,000; a gain on liquidation of joint venture interest of $3,392,000; equity on earnings of joint ventures of $2,348,000; and other income totaling $3,334,000. The company's single-family detached units average 1900 sq. ft. with a sales tag of $103,500. The detached units average 1300 sq. ft. with a price of $80,200. Condominium units average 1200 sq. ft. with a price of $74,800. The company is active primarily in Fla. (94.2%), with some activity in Ariz. (5.6%) and other states (0.2%). In 1990, the company will be expanding into the "Space Coast" and northern Palm Beach, Fla. markets. Non-residential construction consisted of hotels/motels and recreational buildings. All the company's construction activity was subcontracted.
24 **$441,335**	28	**30** **3319 units**	**Hovnanian Enterprises Inc.** 10 Highway 35 Red Bank, N.J. 07701 Kevork S. Hovnanian	For fiscal year ended Feb. 28, 1990, this publicly held corporation (AMEX) and its subsidiaries, K. Hovnanian Co. of N.J., Inc., and K. Hovnanian Cos. of Fla., Inc., built and sold 2973 single-family attached houses for a sales volume of $340,062,000 and 346 single-family detached homes for sales of $42,667,000. Non-residential construction brought another $14,598,000. Additional revenue included $9,873,000 for land sales; $3,843,000 for rental income and management fees; and other income totaling $30,292,000 which includes condo management and mortgage banking/financing. Net income of total dollar volume was 6%. The detached houses average 2000 sq. ft. with a sales price of $215,000. The attached units average 1300 sq. ft. for $130,000. Condominium units average 1100 sq. ft. and sold for $100,000. Families with children (34%) bought most of the units, followed by empty-nesters (23%), young married couples (19%), singles (18%) and retirees (6%). Most of the company's activity is in N.J. (83%), with Fla. (13%) and N.Y. (4%) rounding it out. For 1990, the company is expanding into eastern Pa. All of the construction activity is subcontracted.
25 **$407,577**	33	**45** **2390 units**	**UDC-Universal Dev.** 4812 S. Mill Ave. Tempe, Ariz. 85282 Gary A.Rosenberg	This publicly held corporation built 1828 single-family detached houses for a sales volume of $282,823,982 in calendar year 1989. The firm also constructed 562 single-family attached units for $108,474,655. Rental income and management fees came to $2,944,453. Other income, including development contracting, advisory fees and interest, totaled $13,333,910. Net income was 12.6% of total dollar volume. The company builds 43% of its units in Ariz., 38% in Calif., 8% in N.C., 1% in S.C., 6% in Fla., and 4% in Ga. Families with children accounted for 45% of sales, retirees 35%, empty nesters 15%, young married people with no children 4% and singles 1%. The size of the single-family detached units ranged from 1200 to 3500 sq. ft. The average price was $165,000. The strongest market for the company was Calif., although the firm realized record results in each of its three geographic areas: Ariz., Calif., and the Southeast.
26 **$[illegible]**	—	**10** **7200 units**	**Boston Capital Partners Inc.** 313 Congress St. Boston, Mass. 02210 John P. Manning	This privately-held company constructed 7200 apartments for investors for $360,000,000 in calendar year 1989. Four remodeling and rehabilitation jobs accounted for $14,500,000. Sales volume for non-residential construction, which included shopping centers, was $3,200,000. Rental income and management fees came to $2,200,000. The firm, which is primarily a developer and syndicator of low-income housing, has in its portfolio more than 900 properties in 47 states. Units average 800 sq. ft.
27 **$375,344**	29	**29** **3341 units**	**A.G. Spanos Construction Inc.** 1341 West Robinhood Dr. Stockton, Calif. 95207 Alex G. Spanos	Apartments built for investors, 2837 for $157,085,000, accounted for almost half of the revenue for this privately held company. The firm also built 504 apartments for its own investment valued at $25,200,000. Land sales came to $64,237,000. Rental income and management fees reached $77,990,000. Other income, including syndication fees and interest income, totaled $50,832,000. The company did 36% of its business in Calif., 27% in Nev., 26% in Ga., 4% in Ariz., 2% in Colo., and 5% in Fla. Rental apartments average 887 sq. ft. and rent for an average of $592. Approximately 81%-99% of its construction work was subcontracted in 1989.
28 **$366,593**	30	**76** **1516 units**	**Bramalea California Inc.** One Park Plaza Irvine, Calif. 92714 Peter B. Perrin	This subsidiary of Bramalea, Ltd. in Toronto, Canada, built 1388 single-family detached houses for a sales volume of $328,546,000 in the latest fiscal year ended Oct. 31, 1989. The company also constructed 128 single-family attached units for $27,138,000. Land sales were $1,050,000. Rental income and management fees totaled $6,249,000. Other income, including that from a mortgage company and a design center, was $3,610,000. Net income was 29% of total dollar volume. Figures include housing built by Marlborough Development Corp., which Bramalea purchased in January, 1989. Bramalea and Marlborough built all of their houses in Calif. The biggest single market for both companies was families with children. Single-family detached houses built by both companies ranged from 2000 sq. ft. to 2500 sq. ft., and had average prices from $190,000 to $260,000. Single-family attached houses ranged from 1125 sq. ft. to 1500 sq. ft., and had average prices from $128,000 to $220,000.
29 **$365,800**	49	**86** **1341 units**	**Fieldstone Co.** 14 Corporate Plaza Newport Beach, Calif. 92660 Peter M. Ochs	*Professional Builder* named Peter M. Ochs the 1989 Builder Of The Year. This privately-held company built 1254 single-family detached houses for a sales volume of $323,300,000 in calendar year 1989. The firm also constructed 87 single-family attached units for $20,400,000. Land sales accounted for $6,600,000. Interest and other income totaled $15,500,000. All of Fieldstone's activity was in Calif. The average for a single-family detached house was 2059 sq. ft. in size with a price of $254,000. For single-family attached houses, the figures were 1625 sq. ft. at a price of $212,000.
30 **$361,400**	38	**108** **1049 units**	**Shea Homes** 655 Brea Canyon Road Walnut, Calif. 91789 Roy Humphreys	Construction of 775 single-family detached houses accounted for a sales volume of $190,200,000 for this privately-held company. The company also built 274 single-family attached units for $37,300,000. The market value of non-residential construction was $30,200,000. Land sales came to $55,000,000. Rental income and management fees totaled $36,200,000. Other income came from selling a cable television company for $12,500,000. The firm did 70% of its business in Calif. and 30% in Ariz. Shea acquired Knoell Homes of Phoenix. Single-family detached houses average 2353 sq. ft. and sold for an average price of $245,000. The figures for single-family attached houses were 1248 sq. ft. at a price of $136,000. Families with children accounted for 70% of the company's sales. Sales to young married people with no children provided 20% of sales. The rest of sales were to singles (5%), empty nesters (3%) and retirees (2%).

THE 400

Strong California market helps Ahmanson, Pacific Scene and Warmington Homes advance

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
31 **$359,312**	32	**74** **1560 units**	**Coscan Development Corp.** P.O. Box 428 Toronto, Canada M5X1H9 L. Ross Cullingworth	For calendar year 1989, the U.S. subsidiaries of this publicly held Canadian firm (Toronto Stock Exchange), Coscan Florida, Inc., Coscan Waterways, Inc., and Coscan Washington, Inc., built 973 single-family detached and attached houses for a sales volume of $114,875,000. Land sales accounted for $10,690,000. Other income, including interest and non-residential construction, came to $25,913,000. Canadian single-family detached and attached units totaled 587 for revenues of $128,007,000. Non-commercial construction totaled $816,930. The company sells mostly to families with children (41%), young married couples (27%), empty-nesters (18%), singles (8%) and retirees (6%). Most of the company's activity is in Calif. (28%), followed by Ontario, Canada (26%), Washington D.C. (25%), Fla. (18%), and Ariz. (3%). In 1989, the company bought Davidson Communities, a San Diego-based home builder. The company subcontracts 81%-99% of its construction activity.
32 **$357,369**	34	**162** **722 units**	**Fairfield Communities Inc.** 2800 Cantrell Road Little Rock, Ark. 72202 C. Randolph Warner Jr.	This publicly held corporation built 722 single-family detached houses for a sales volume of $89,598,000 in calendar year 1989. Non-residential construction was valued at $25,962,000. Land sales came to $27,352,000. Other income, including timesharing and resort earnings interest, totaled $214,457,000. Net income was 7.9% of total dollar volume. The company did 44% of its business in Ariz., 36% in Fla., 8% in Tenn., 6% in N.C., 2% in Ark. and 4% in other locations including Calif., Colo., Ga., S.C., Va. and St. Croix in the Virgin Islands.
33 **$355,934**	24	**135** **839 units**	**Artery Organization Inc.** 7200 Wisconsin Ave. Bethesda, Md. 20814 Henry H. Goldberg	For the fiscal year ended Oct. 31, 1989, this privately held company built 589 single-family attached units for $72,475,000 and 86 single-family detached houses for $19,596,000. The firm also manufactured 150 single-family panelized units for $2,000,000. A total of 85 high-rise residential units accounted for $19,000,000. Non-residential construction, which included offices buildings, was priced at $109,000,000. Land sales totaled $6,836,000. Rental income and management fees added up to $127,038,000. Other income, including loan servicing, came to $8,054,000. The company did 55% of its business in Md. and 45% in Va. Sales were divided between young married couples with no children (50%), families with children (30%), and singles (20%). The average single-family detached house had 2000 sq. ft. and sold for $230,000. The figures for single-family attached units were 1400 sq. ft. and $125,000. Company also built 15 apartments for their own portfolio valued at $935,000.Rental apartments averaged 900 sq. ft. with a monthly rent of $916.
34 **$341,300**	20	**152** **786 units**	**Home Capital Development Group** 707 Broadway, 10th Floor San Diego, Calif. 92101 Jack Roach	This subsidiary of HomeFed Bank in San Diego sold 1766 housing units for $184,500,000 in calendar year 1989. The land sales figure was $142,300,000. Rental income and management fees were $14,500,000. The firm's gross operating revenue of $341,300,000 was the pro-rated portion of the $605,439,000 obtained with joint venture partners including the Buie Corp.; R.B. McComic, Inc.; McMillin Communities, Inc.; Barratt American; M.J. Brock & Sons; and Coker-Ewing. The firm did 96% of its business in Calif. and 4% in Fla. Single-family detached houses ranged from 2400 sq. ft. to 2600 sq. ft., and sold for an average price of $300,900. A new real estate development subsidiary, HomeFed Communities, Inc., was created under the parent company, HomeFed Corp. Acquisitions included five projects in San Diego County, two in Northern California, and one in Orange County. Lots also were purchased in three different projects in Fla.
35 **$338,033**	56	**83** **1365 units**	**Warmington Homes** 3090 Pullman St., Ste A Costa Mesa, Calif. 92626 James P. Warmington	The sales volume for this privately held company was $338,033,000 in calendar year 1989 for 1250 single-family detached houses and 115 single-family attached units. The firm did all of its business in Calif. Single-family detached houses average 2200 sq. ft. and sold for $265,000. The figures for single-family attached units were 1400 sq. ft. and $190,000. Families with children accounted for 55% of sales. Other groups included young married couples with no children (15%), empty nesters (12%), retirees (10%) and singles (8%).
36 **$333,456**	70	**100** **1180 units**	**Ahmanson Developments Inc.** 1370 S. Valley Vista Dr., Diamond Bar, Calif. 91765 Jeffrey A. Slavin	This subsidiary of H.F. Ahmanson & Co. built 959 single-family detached houses for a sales volume of $200,245,000 in calendar year 1989. A total of 221 single-family attached units produced a sales volume of $33,213,000. Land sales accounted for $94,890,000. Rental income and management fees came to $836,000. Other income, including interest revenue, produced $4,272,000. The firm does 86.9% of its business in Calif., 9.8% in Ill., and 3.3% in Fla. Single-family detached houses sold for an average price of $208,806. The cost figure for single-family attached units was $150,285.
37 **$317,520**	40	**3** **15905 units**	**Redman Homes** 2550 Walnut Hill Lane Dallas, Texas 75229 Michael Brignole	In calendar year 1989 this privately held company produced 15,875 mobile homes for a sales volume of $316,520,000. An additional $1,000,000 in revenue came from the production of 30 single-family modular units. A subsidiary of the company is Silvercrest Industries, which was acquired in 1989. Silvercrest has two plants in Calif. and one in Ore. Redman Homes does business in 48 states.
38 **$315,712**	27	**148** **775 units**	**J.M. Peters Co.** 3501 Jamboree Rd. Newport Beach, Calif. 92658-7150 James M. Peters	For the latest fiscal year ended Feb. 28, 1990, this publicly-held firm built 676 single-family detached houses for a sales volume of $294,428,000, plus 99 single-family attached units for $12,024,000. Other income, including interest and design center revenue, came to $9,260,000. Net income was 8% of total dollar volume. All of the company's business was conducted in Calif. Single-family detached houses average 3200 sq. ft. and sold for $436,000. The figures for single-family attached units were 1600 sq. ft. and an average price of $121,000. Families with children accounted for 50% of sales. Other groups included young married couples with no children (15%), empty nesters (15%), retirees (10%), and singles (10%).
39 **$296,823**	79	**84** **1354 units**	**Pacific S[illegible] Inc.** 3900 Ha[illegible]y Street San Diego, Calif. 92110 Tawfiq Khoury	In calendar year 1989 this privately-held company built 859 single-family detached houses for a sales volume of $174,775,000 and 149 single-family attached units for $20,115,000. The firm also built 228 apartments for its own investment and 118 apartments for investors for revenues of $23,000,000. Land sales came to $14,000,000. Rental income and management fees totaled $51,000,000. The company did 98% of its business in Calif. and 2% in Ariz. Single-family detached houses average 2600 sq. ft. and were priced at $232,000.
40 **$285,500**	36	**123** **967 units**	**Goldrich & Kest Industries** 5150 Overland Ave. Culver City, Calif. 90231 Jona Goldrich	The construction of 197 single-family detached houses produced a sales volume of $75,824,600 in calendar year 1989 for this privately-held company. A sales volume of $25,864,000 was obtained from the building of 152 single-family attached units. The firm also built 618 apartments at $16,995,000 for its own investment. Rental income and management fees totaled $166,816,780. Subsidiaries included Goldrich & Kest Construction Co. and Prestige Homes, Inc. The company does all of its business in Calif.

THE 400

Summit shows strong growth operating in the Southeast: Florida, Virginia and North Carolina

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
41 **$275,000**	80	**69** **1693 units**	**Woodcrest Development Inc.** 17911 Mitchell Ave. Irvine, Calif. 92714 Ronald J. Gilles	The sale of 1064 single-family detached houses for $231,000,000 accounted for the bulk of this privately-held company's revenues in calendar year 1989. The firm also built 179 single-family attached units for $31,000,000, as well as 450 apartments at $13,000,000 for its own investment. All business was conducted in Calif. Families with children accounted for the largest single group of buyers at 50%. Other key segments were young married people with no children (20%), empty nesters (15%), retirees (10%), and singles (5%). The average size of the company's single-family detached house was 2000 sq. ft., and the price was $253,000. For single-family attached units the figures were 1650 sq. ft. and $200,000. Rental apartments average 900 sq. ft. and rented for $850 a month. The company opened 10 new projects in 1989.
42 **$271,989**	118	**34** **2925 units**	**Summit Properties** 212 S. Tyron St., Ste. 800 Charlotte, N.C. 28281 William F. Paulsen	This privately-held company built 2925 apartments for its own investment for a market value of $176,842,000 in calendar year 1989. The firm produced land sales of $57,610,000. Rental income and management fees came to $37,537,100. The company did 33% of its business in Fla., 25% in Va., 18% in N.C., 13% in Md., and 11% in Ga. The apartments average 950 sq. ft. and rented for $576 a month. The company's rental customers divided among singles with 55%, young married people with no children at 20%, empty nesters with 10%, retirees with 10%, and families with children at 5%.
43 **$268,970**	31	**4** **15409 units**	**Skyline Corporation** P.O. Box 743 Elkhart, Ind. 46515 Arthur J. Decio	This publicly-held company produced 15,409 mobiles homes for a sales volume of $268,970,000 in calendar year 1989. Not included in this listing was the additional sales volume of $103,704,000 for recreational vehicles.
44 **$268,000**	22	**99** **1182 units**	**Citation Builders** 17731 Irvine Blvd. Tustin, Calif. 92680 A. Allen, S. Schott	In calendar year 1989, the bulk of this company's revenue came from the sale of 1013 single-family detached houses for $240,000,000. The privately-held firm also sold 169 single-family attached units for $28,000,000. All of this business was conducted in Calif.
45 **$259,449**	47	**145** **790 units**	**Newhall Land & Farming Co.** 23823 Valencia Blvd. Valencia, Calif. 91355 Thomas L. Lee	The biggest single category of revenue in calendar year 1989 for this publicly-held corporation was $103,613,000 for building and selling 344 single-family detached houses. The firm also obtained $30,660,000 from sales of 230 single-family attached units. The company also built 216 apartments valued at $19,600,000 for its own investment. Non-residential construction came to $1,550,000. Land sales were $49,438,000. Rental income and management fees totaled $15,835,000. Other income, generated from agribusiness and interest, totaled $38,753,000. Net income was 28.8% of total dollar volume. A subsidiary is the Valencia Co. of Valencia, Calif. All business was conducted in Calif. Single-family detached houses average 1800 sq. ft. and sell for an average of $286,000. The figures for single-family attached units were 1100 sq. ft. and a price of $133,000. The division of sales was 40% to families with children, 20% to young married couples with no children, 20% to singles, 10% to empty nesters and 10% to retirees.
46 **$258,460**	42	**37** **2827 units**	**General Homes Corp.** P.O. Box 37148 Houston, Texas 77036 James W. Olafson	For the fiscal year ended Sept. 30, 1989, this publicly held corporation sold 2827 single-family detached houses for a volume of $249,233,000. Land sales of $9,227,000 were the other contribution to revenue. The company did 60% of its business in Texas, 20% in Ariz., and 20% in Fla. The single-family detached houses average 1824 sq. ft. and sold for $88,162. The largest buyer category was 48% for young married couples with no children. Other groups were families with children (28%), singles (20%), empty nesters (3%), and retirees (1%).
47 **$250,100**	53	**133** **852 units**	**Buie Corp.** 16935 West Bernardo Drive San Diego, Calif. 92127 Robert F. Buie	The biggest single category of revenue for this privately-held company was $144,050,000 from building and selling 547 single-family detached houses in calendar year 1989. The firm also sold 205 single-family attached houses for $33,346,000. Buie also built 100 apartments for its own investment valued at $10,200,000. These were the first apartments built by Buie. Non-residential construction was valued at $39,900,000. Land sales came to $20,400,000. Rental income and management fees totaled $2,204,000. The company does all of its business in Calif. Single-family detached houses average 2300 sq. ft. and sold for $245,000. Single-family attached houses average 1150 sq. ft. and sold for $165,000. For apartment condominiums, the figures were 1200 sq. ft. and a price of $185,000. The averages for rental apartments were 850 sq. ft. and a monthly rent of $875. Families with children (40% of sales) were the biggest buyer category, followed closely by young married couples with no children (35%). Other types of customers were empty nesters (15%), retirees (5%), and singles (5%).
48 **$249,000**	50	**120** **989 units**	**Barratt American Inc.** 30 Fairbanks, Ste. 110 Irvine, Calif. 92718 Mark L. Frazier	This subsidiary of Barratt Developments PLC in England sold 508 single-family detached houses for $115,139,000 in calendar year 1989. The company also sold 481 single-family attached units for $79,365,000. Land sales totaled $54,496,000. The firm did all of its business in Calif. A new division was opened in Los Angeles to cover the high desert area and the Los Angeles basin. Barratt American contributed $36.6 million to the operating profits of Barratt Developments or 24% of the total profits. Barratt Developments completed close to 7600 homes last year through its operations in the United Kingdom and France as well as the United States.
49 **$246,000**	89	**144** **794 units**	**Condiotti Enterprises Inc.** P.O. Box 6855 Santa Rosa, Calif. 95406 A. Condiotti	The largest single contributor to revenue for this privately-held company in calendar year 1989 was $115,000,000 from the sales of 730 single-family detached houses. The company also sold 64 single-family attached units for $27,000,000. Nine remodeling and rehabilitation jobs produced $1,000,000. Non-residential construction came to $7,000,000. Land sales accounted for $18,000,000. Rental income and management fees totaled $16,000,000. Single-family detached houses average 1800 sq. ft. and sold for $170,000. The figures for single-family attached units were 1450 sq. ft. and a price of $200,000. All of the company's business was done in Calif.
49 **$246,000**	57	**52** **2060 units**	**M/I Schottenstein Inc.** 1855 E. Dublin-Granville Columbus, Ohio 43229 Irving E. Schottenstein	Almost all this publicly-held company's revenue came from the sale of 2060 single-family detached houses for $233,000,000. Other sources of income were $11,000,000 from land sales and $2,000,000 of other income. The average price of a single-family detached house was $115,800.

ANNUAL REPORT OF HOUSING'S GIANTS ®

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
51 **$244,309**	41	**5** 12197 units	**Champion Home Builders Co.** 5573 E. North St. Dryden, Mich. 48428 Joseph J. Morris	This publicly held corporation in calendar year 1989 manufactured 12,197 mobile homes with a market value of $238,384,000. Subsidiary operations include Champion Home Communities Inc. The firm employs more than 100 people full time.
52 **$243,289**	116	**33** 2933 units	**Hunt Building Corp.** P.O. Box 9368 El Paso, Texas 79984 M. L. Hunt	This privately held company in fiscal year (ended 12/31/89) built 115 single-family detached units for $5,925,562 and 1390 single-family attached units for $103,896,548. In addition, the firm built 1428 apartments with a market value of $107,500,000 for its own investment. Non-res construction had a market value of $9,747,791. Rental income and management fees brought $12,615,000. Miscellaneous income was $3,605,000. Detached housing averages 1600 sq. ft. of space for $55,000. Attached housing averages 1400 sq. ft. for $80,000. Firm is active in Calif. (49%), S.D. (11%), La. (10%), Texas (10%), Kan. (9%), Mo. (7%), and Ariz. (4%). It employs more than 100 people full time.
53 **$242,703**	51	**7** 9252 units	**Clayton Homes Inc.** P.O. Box 15169 Knoxville, Tenn. 37901 Jim Clayton	This publicly held corporation in fiscal year ended 6/30/89 manufactured 9252 mobile homes for a sales volume of $146,613,000. Miscellaneous income from retail sales, finance and insurance totaled $96,090,000. Firm has more than 100 full-time employees.
54 **$242,356**	55	**212** 468 units	**Grupe Co.** P.O. Box 7576 Stockton, Calif. 95207 Greenlaw Grupe Jr.	Privately held company in calendar year 1989 built and sold 286 single-family detached units for $58,750,733 and 182 single-family attached units for $12,135,236. Company also built $19,534,772 worth of apartments for investors. Non-res construction of warehouses had a market value of $3,435,146. Land sales totaled $53,090,292. Rental income and management fees brought $74,750,829. Miscellaneous income was $20,659,181. Firm is active in Calif. (94%), Colo. (5%) and Okla. (1%). It employs more than 100 people full time. Subsidiaries inclu[illegible] Development Cos. of Southern Calif., northern Calif., and Los Angeles, Calif.
55 **$237,000**	60	**250** 371 units	**McMillin Communities** 2727 Hoover Ave. National City, Calif. 92050 Macey L. McMillin, Jr.	This privately held company in calendar year 1989 built and sold 371 single-family detached units for $110,000,000. Rental income and management fees brought $5,000,000. General contracting services totaled $12,200,000. Detached homes average 2100 square feet of space for $280,000. Sales were to families with children (50%), young marrieds without children (15%), empty-nesters (15%), singles (10%) and retirees (10%). Firm is active solely in Calif. It employs more than 100 people full time. Subsidiaries include San Diego Diversified Builder Services and Diversified Turnkey Construction Co.
56 **$229,058**	268	**41** 2585 units	**J.L. Construction Co.** P.O. Box 369 Carlsbad, Calif. 92008 James Loren Franklin	In calendar year 1989 this privately held company built and sold 109 single-family detached units for $2,858,000. It also built 2476 apartments with a market value of $226,200,000 for its own investment. Detached homes average 1300 sq. ft. of space for $142,900. Rental apartments average 950 sq. ft. for $902 per month. Sales were to young marrieds without children (55%), families with children (40%), and singles (5%). Firm is active solely in Calif. It has more than 100 full-time employees.
57 **$228,829**	61	**94** 1249 units	**Griffin Homes** 24005 Ventura Blvd. Calabasas, Calif. 91302 Paul E. Griffin, Jr.	Privately held company in fiscal year ended 10/31/89 built and sold 1117 single-family detached units for $216,563,000 and 132 single-family attached units for $12,266,000. Detached homes average 1900 sq. ft. of space for $193,800. Attached homes average 960 sq. ft. of space for $93,000. Sales were to families with children (50%), young couples without children (35%), singles (5%), empty-nesters (5%) and retirees (5%). Firm is active solely in Calif. It employs more than 100 people full time.
58 **$227,472**	111	**77** 1513 units	**Elliott Homes Inc.** 11093 Sun Center Drive Rancho Cordova, Calif. 95670 Harry C. Elliott III	This privately held company in calendar year 1989 built and sold 1489 single-family detached units for $180,425,000 and 24 single-family attached units for $1,395,000. Land sales totaled $35,670,000. Rental income and management fees brought $6,982,000. Miscellaneous income totaled $120,000. Detached homes average 1800 sq. ft. of space for $175,000. Rental apartments average 900 sq. ft. of space for $860 per month. Sales were to families with children (50%), young couples without children (30%), empty-nesters (10%), singles (5%) and retirees (5%). Firm is active in Calif. (85%) and Ariz. (15%). It has more than 100 full-time employees.
59 **$218,600**	39	**230** 414 units	**Forest City Enterprises** 10800 Brookpark Road Cleveland, Ohio 44130 Albert B. Ratner	This publicly held corporation in fiscal year ended 1/31/90 built 414 apartments with a market value of $53,000,000 for its own investment. Non-res construction of shopping centers and office buildings totaled $408,000,000. Rental income and management fees brought $82,600,000. Rental apartments average 1000 sq. ft. of space for $1,000. Firm is active in Calif. (61%), Ohio (16%), Md. (12%), and N.Y. (11%). It has more than 100 full-time employees. Subsidiaries include Forest City Residential Development, Sunrise Land Co., and Forest City Properties Corp.
60 **$204,626**	101	**46** 2389 units	**Robert Randall Co.** 9500 S. W. Barbur Blvd. Portland, Ore. 97219 Robert D. Randall	This privately held company in calendar year 1989 built 2389 apartments with a market value of $143,340,000 for its own investment. It also completed 15 remodeling jobs for $500,000. Land sales accounted for $25,750,000 in revenues. Rental income and management fees brought $24,029,000. Miscellaneous income totaled $11,007,000. Rental apartments average 810 sq. ft. of space for $600. Sales were to singles (25%), young couples without children (25%), families with children (25%), retirees (15%) and empty-nesters (10%). Firm is active in Ore. (85%), Calif. (10%) and Wash. (5%). It has more than 100 full-time employees. Subsidiary operations include KR West Co., CTL Management, and Pacific Frontier Wood Markets.
61 **$201,500**	44	**54** 2020 units	**Robertson Homes** 6653 Embarcadero Stockton, Calif. 95209 Barton R. Robertson	This privately held company in fiscal year ended 3/31/89 built for investors 2020 apartments with a market value of $151,500,000. Rental income and management fees brought $50,000,000 in revenues. Rental apartments average 860 sq. ft. of space for $800 per month. The firm is active in Calif. (85%), Md. (10%), and Nev. (5%). It has more than 100 full-time employees.

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Subsidiary of London-based George Wimpey builds 1380 homes throughout the South

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
62 **$201,000**	96	**180** **602 units**	**Sunrise Co.** 75-005 Country Club Drive Palm Desert, Calif. 92260 William Bone	Privately held company in calendar year 1989 built and sold 136 single-family detached units for $62,000,000 and 466 single-family attached units for $112,000,000. Rental income and management fees totaled $16,500,000. Miscellaneous income was $10,500,000. Detached homes average 3150 sq. ft. of space for $454,000. Attached homes average 2040 sq. ft. of space for $240,000. Sales were to empty-nesters (68%), singles (18%), retirees (9%), families with children (3%) and young couples without children (2%). Firm is active solely in Calif. It has more than 100 full-time employees.
63 **$199,305**	54	**20** **5257 units**	**Jim Walter Homes Inc.** 1500 N. Dale Mabry Hwy. Tampa, Fla. 33607 Robert W. Michael	In calendar year 1989 this privately held company built and sold 5257 single-family detached units for $197,786,759. The firm also completed 127 remodeling jobs for $1,519,076. Detached homes average 1200 sq. ft. of space for $37,600. The firm is active in Ariz., N.M., Texas, Okla., Mo., Ark., La., Miss., Ala., Tenn., Ga., Fla., S.C., N.C., Ky., W.Va., and Md. It employs more than 100 people full time. Subsidiary operations include Walter Home Improvement.
64 **$198,000**	68	**81** **1380 units**	**George Wimpey Inc.** 3565 Seventh Ave. San Diego, Calif. 92103 P. D. Whitehouse	For the fiscal year ended 12/31/89, this subsidiary of George Wimpey PLC, London, England, built and sold 1380 single-family detached units for $186,000,000. Land sales accounted for $12,000,000. Detached homes average 1800 sq. ft. of space for $135,000. Firm is active in Calif. (75%), Fla. (15%), Ga. (5%) and Texas (5%). It employs more than 100 people full time. Subsidiaries include Morrison Homes of northern and Southern Calif., and Monarch Homes.
65 **$196,800**	—	**64** **1750 units**	**Post Properties Inc.** 100 Cumberland Circle, Atlanta, Ga. 30339 John A. Williams	This privately held company in calendar year 1989 built 1750 apartments with a market value of $122,025,000 for its own investment. Land sales generated $8,275,000. Rental income and management fees brought $66,500,000. Rental apartments average 927 sq. ft. of space for $620 per month. Firm is active in Ga. (58%), Fla. (30%) and Va. (12%). It has more than 100 full-time employees. Subsidiaries include Post Atlanta, Post Florida and Post Washington.
66 **$195,262**	98	**179** **607 units**	**Hofmann Co.** P.O. Box 907 Concord, Calif. 94522 K. H. Hofmann	This privately held company in calendar year 1989 built and sold 607 single-family detached units for $109,597,800. Non-res construction of shopping centers, warehouses and restaurants totaled $4,875,000. Land sales accounted for $49,923,000 in revenues. Rental income and management fees brought $12,456,400. Miscellaneous income totaled $18,410,000. Detached homes average 1962 sq. ft. of space for $180,556. Sales were primarily to families with children, but also to young married couples without children and the singles segments. Firm is active solely in Calif. It has more than 100 full-time employees. Subsidiary operations include Computech Lumber Co. of Fairfield, Calif.
67 **$194,222**	82	**365** **166 units**	**Avatar Holdings Inc.** 201 Alhambra Circle Coral Gables, Fla. 33134 Lawrence Wilkov	This publicly held corporation in calendar year 1989 built and sold 156 single-family detached units for $12,588,000 and 10 single-family attached units for $629,000. Land sales accounted for $98,371,000 in revenues. Rental income and management fees totaled $2,939,000. Miscellaneous income was $79,695,000. Detached homes average 1650 sq. ft. of space for $80,692. Attached homes average 1250 sq. ft. of space for $62,900. Firm is active solely in Fla. It has more than 100 full-time employees. Subsidiary operations include Avatar Properties and Rio Rico Properties.
68 **$193,407**	48	**223** **435 units**	**A-M Homes** 125 E. Victoria St. Santa Barbara, Calif. 93101 Mike Muench & James Araujo	This privately held company in the fiscal year ended 6/30/89 built and sold 340 single-family detached units for $107,136,000 and 95 single-family attached units for $21,728,000. Land sales generated $55,432,000 in revenues. Rental income and management fees accounted for $3,020,000. Miscellaneous income totaled $6,091,000. Detached homes average 2550 sq. ft. of space for $315,100. Attached homes average 1750 sq. ft. of space for $228,700. Sales were to families with children (60%), young couples without children (25%), singles (5%), empty-nesters (5%) and retirees (5%). Firm is active in Calif. (65%) and Ariz. (35%). It has more than 100 full-time employees. Subsidiary operations include A-M Northern California Builders, A-M Southern California Builders, Trailside Construction Co., and AMC Financial.
69 **$191,811**	81	**87** **1330 units**	**Lexington Homes Inc.** 1156 W. Shure Dr. Arlington Heights, Ill. 60004 Ronald J. Benach	This privately held company in calendar year 1989 built and sold 479 single-family detached units for $76,250,000 and 851 single-family attached units for $115,550,000. Detached homes average 2030 sq. ft. of space for $180,330. Attached homes average 1670 sq. ft. of space for $157,685. Sales were to families with children (50%), young couples without children (25%), singles (12.5%), empty-nesters (10%) and retirees (2.5%). Firm is active in Ill. (80%) and Fla. (20%). It has more than 100 full-time employees.
70 **$191,068**	64	**53** **2047 units**	**Newport Pacific Development Corp.** 4400 MacArthur Blvd. Newport Beach, Calif. 92660 Magdy Hanna	In the fiscal year ended 1/31/90 this privately held company built and sold 49 single-family detached units for $8,800,000 and 413 single-family attached units for $59,379,000. It also built 131 apartments with a market value of $12,400,000 for investors and 1454 apartments with a market value of $104,350,000 for its own investment. Rental income and management fees brought $850,000 in revenues. Miscellaneous income totaled $4,900,000. Firm is active solely in Calif. It employs more than 100 people full time. Subsidiaries include Andrew Homes, Newport Pacific Construction, and Newport Pacific Architecture.
71 **$189,491**	131	**80** **1392 units**	**Del Webb Corp.** P.O. Box 29040 Phoenix, Ariz. 85038 Philip J. Dion	This publicly held corporation in calendar year 1989 built and sold 1145 single-family detached units for $146,310,000 and 247 single-family attached units for $35,373,000. Land sales generated $5,081,000 in revenues. Miscellaneous income totaled $2,727,000. Detached homes average 1627 sq. ft. of space for $122,483. Attached homes average 1327 sq. ft. of space for $93,116. Firm is active in Ariz. (54%) and Nev. (46%). It employs more than 100 people full time.
72 **$188,311**	59	**131** **877 units**	**Arthur Rutenberg Corp.** 15351 Roosevelt Blvd. Clearwater, Fla. 34620 Arthur Rutenberg	This privately held company in calendar year 1989 built and sold 789 single-family detached units for $168,402,248 and 88 single-family attached units for $15,905,611. Land sales generated $4,003,260 in revenues. Detached homes average 2790 sq. ft. of space for $212,682. Attached homes average 1891 sq. ft. of space for $161,886. Sales were to families with children (60%), retirees (20%), young couples without children (10%), singles (5%) and empty-nesters (5%). Firm is active in Fla. (93%) and N.C. (7%). It has more than 100 full-time employees. The company has 31 subsidiaries.

THE 400

Lokey and Bresler & Reiner set pace as two of the fastest growing firms in the Giant 400

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
73 **$185,000**	77	**57** **1955** **units**	**Edward Rose Building Enterprises** P.O. Box 937 Southfield, Mich. 48037 Sheldon Rose	This privately held company in calendar year 1989 built and sold 55 single-family detached units for $6,000,000. It also built 1900 apartments with a market value of $49,000,000 for its own investment. Rental income and management fees totaled $130,000,000. Detached homes average 1700 sq. ft. of space for $98,000. Rental apartments average 830 sq. ft. of space for $460 per month. Sales were primarily to families with children. Firm is active in Mich., Ind., Ill., Ohio, Wis., N.C., S.C. and Va. It employs more than 100 people full time.
74 **$184,595**	58	**168** **676** **units**	**Toll Brothers Inc.** 3103 Philmont Ave. Huntingdon Valley, Pa. 19006 Robert I. Toll	This publicly held corporation in fiscal year ended 10/31/89 built and sold 537 single-family detached units for $154,756,000 and 139 single-family attached units for $22,108,000. Miscellaneous income totaled $7,731,000. Detached homes average 3000 sq. ft. of space for $305,000. Attached homes average 1800 sq. ft. of space for $173,000. Sales were to families with children (65%), young married, no children (20%), empty-nesters (10%), singles (3%) and retirees (2%). Firm is active in Pa., N.J., Del., Md. and Mass. It has more than 100 full-time employees.
75 **$183,091**	227	**38** **2777** **units**	**Lokey Cos.** 1800 Bering Dr. Ste. 220 Houston, Texas 77057 Kenneth R. Lokey	This privately held company in calendar year 1989 built and sold 214 single-family detached units for $20,359,000 and 200 single-family attached units for $16,705,000. It also built 2363 apartments with a market value of $141,827,000 for investors. Land sales accounted for $3,000,000 in revenues. Rental income and management fees brought $1,200,000. Firm is active in Calif., Wash., Ore., Del., Fla., Ohio, Tenn., Ala. and N.C. It has more than 100 full-time employees. Subsidiaries include Lokey Construction Co., Lokey Management Co. and Ken Lokey Homes.
76 **$182,178**	37	**56** **1982** **units**	**J.L. Mason Group Inc.** 5020 Tamiami Trail N. Naples, Fla. 33940 Joseph L. Mason	In the 12 months ending 1/31/90 (fiscal year ends 7/31) this privately held company built and sold 1174 single-family detached houses for $104,415,000 and 441 single-family attached houses for $29,450,000. The company also built 367 apartments for investors and sold them for $12,000,000. Non residential construction generated $3,089,000. Other income came from land sales of $16,048,000, rental income and management fees of $9,531,000 and interest, commission and other income of $7,645,000. Detached houses average 1850 sq. ft. in size and sold for an average price of $135,000. Attached houses average 1175 sq. ft. in size and sold for an average price of $50,500. Apartments average 550 sq. ft. and have an average rent of $570 a month. The company has more than 100 employees and subs out between 81% and 99% of its work. Company is active in Mo. (55%) and Fla. (45%).
77 **$178,781**	100	**49** **2346** **units**	**Regis Homes** 5120 Campus Drive Newport Beach, Calif. 92660 Geoffrey L. Stack	In fiscal year ended 11/30/89 this privately held company built and sold 432 apartments to investors for $42,579,370. The company also built 1914 apartments for its own investment valued at $132,788,793. Rental income and management fees of $3,413,155 also contributed to the company's revenues. The firm has more than 100 employees and subs out between 81% and 99% of its work. In addition to apartments, the company is currently building a town home project in Agoura Hills, Calif. Attached housing averages 1200 sq. ft. and sells for an average price of $200,000. The buyers are 40% young marrieds, 30% singles, 20% empty nesters, and 10% families. Company is active exclusively in Calif.
78 **$177,325**	87	**72** **1602** **units**	**Colson & Colson Constr. Co.** 2741 12th St. S.E. Salem, Ore. 97302 William E. Colson	This privately held company in calendar 1989 built 1602 apartments for its own investment valued at $112,825,000. Rental income and management fees generated $64,500,000 in income for the balance of the company's volume. Apartments average 900 sq. ft. in size and rent for an average of $980 a month. Tenants are all retirees. The company is active in British Columbia (7%) and 10 of the United States: Wash. (14%), Iowa (13%), Mo. (12%), R.I. (11%), Calif. (9%), Neb. (6%), and 7% each in Ark., Va., N.C. and Ill. Most recent projects include retirement housing in Salem, Ore.; Lincoln, Neb.; Baton Rouge, La.; Normal, Ill.; Vista, Calif.; and Greenville, S.C.
79 **$173,997**	333	**118** **992** **units**	**Bresler & Reiner Inc.** 401 M St., S.W. Washington, D.C. 20024 Charles S. Bresler	In fiscal year ended 12/31/89, this publicly held corporation, traded over the counter, built and sold 203 single-family detached houses for $29,668,000. The company also built 789 apartments for its own investment valued at $36,000,000. The construction of 125 high-rise residential units added another $36,000,000. Numerous remodeling and rehabilitation jobs added another $4,000,000. The market value of non residential construction was $36,000,000. Land sales of $8,575,000 and rental income/management fees of $12,191,000 were other sources of revenue. Additional income of $11,563,000 came from other sources including interest of $3,332,000, equipment leasing of $3,319,000, and the operation of a nursing home of $4,912,000. Detached houses average 1200 sq. ft. and average $165,000 in price. Attached units average 950 sq. ft. and sold for an average price of $125,000. Condos average 850 sq. ft. and were priced at $1.50 a sq. ft. Apartments average 750 sq. ft. and rented for $0.75 a sq. ft. per month. Company is active in Md. (46%), Pa. (22%), N.J. (12%), and 10% each in Va. and Fla.
80 **$173,883**	99	**85** **1350** **units**	**Continental Homes Holding** P.O.Box 60010 Phoenix, Ariz. 85082 Kathleen Wade/Donald Loback	In fiscal year ended 5/31/89, this publicly held corporation built and sold 1300 single-family detached houses and 50 attached houses for a total of $170,000,000 in sales volume. Land sales generated $3,597,000. Mortgage banking and other income added $266,000 to the firm's revenues. Of the firm's total dollar volume, 2.5% was net income. Subsidiaries are Continental Homes in Phoenix, and KDB Homes in Denver, both engaged in single-family construction. Detached houses average 1800 sq. ft. in size and $107,000 in price. Attached houses average 1100 sq. ft. in size and $60,000 in price. The firm has more than 100 employees and subcontracts all of its construction work. The company is active in Ariz. (88%), Southern Calif. (9%), and Denver (3%).
81 **$172,407**	86	**111** **1019** **units**	**International American Homes** 100 Walnut Ave. Clark, N.J. 07066 Robert H. Winnerman	In calendar 1989 this publicly held corporation (traded on the NASDAQ exchange) built and sold 626 single-family detached houses for $96,636,000 and 393 single-family attached houses $53,975,000. Additional income came from land sales of $16,222,000 and other sources including mortgage fees and interest of $5,574,000. The company has four home building subsidiaries: Porten Sullivan Corp., Bethesda, Md.; Suarez Housing Corp., Tampa, Fla.; Porten Sullivan Corp. of Florida, Boca Raton, Fla.; and Inland Pacific Communities Inc., Newport Beach, Calif. A fourth subsidiary is Certified American Mortgage Corp., Bethesda, Md. Detached houses average 1900 sq. ft. and sell for an average price of $154,000. Attached houses average 1450 sq. ft. and sell for an average price of $137,000. Buyers are young marrieds (30%), families (30%), singles (25%), empty nesters (10%), and retirees (5%). The company draws 56% of its sales from activity in the Washington, D.C. region (including Md. and Va.). Other volume is derived from greater Tampa, Fla. (16%), southeast Fla. (12%), Southern Calif. (12%), and greater Baltimore (4%).

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Illinois-based Kimball Hill expands into Texas, moves up 97 positions on Giant listings

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
82 **$170,000**	—	**246** **381 units**	**Brighton Homes** 505 N. Tustin Ave. Santa Ana, Calif. 92705 Todd S. Cunningham	This privately held company in calendar 1989 built and sold 381 single-family detached houses, which represents the firm's entire sales volume. These houses average 3200 sq. ft. and sold for an average price of $445,000. Buyers were 65% families, 18% young married, and 10% each are singles and empty nesters. The firm has between 51 and 100 employees and subcontracts 100% of its work. New acquisitions include 1000 acres in Lake Elsinore, 274 lots in Carlsbad, and 400 lots in Yorba Linda. The firm is active exclusively in Calif.
83 **$167,610**	166	**124** **953 units**	**Winncrest Homes** 9985 Folsom Blvd. Sacramento, Calif. 95827 Thomas P. Winn	In calendar 1989 this privately held company built and sold 925 single-family detached houses for $138,750,000 and 28 single-family attached houses for $3,080,000. Other income came from land sales of $25,500,000 and rental income and management fees of $280,000. Subsidiaries include River City Sales and River City Escrow. Detached houses average 1910 sq. ft. and sold for $91 per sq. ft. Buyers were 45% families, 25% young marrieds and 10% each singles, empty nesters and retirees. Company is active exclusively in Calif.
84 **$166,917**	142	**115** **1002 units**	**McBail Co.** 3200 Danville Blvd. Alamo, Calif. 94507-1914 Wesley Bailey & E. J. McGah	In calendar 1989 this privately held company built and sold 823 single-family detached houses for $141,048,000 and 31 single-family attached houses for $10,092,000. The company also built and sold 148 apartments for investors for $12,266,000. Other income came from $2,065,000 in land sales and rental income and management fees of $1,446,000. Subsidiaries include Bailey & McGah and Dutton, McGah & Bailey in Nevada. Casa Grande Co., and Sequoia in Northern Calif. Company is active in Calif. (63%) and Nev. (37%).
85 **$163,500**	106	**70** **1652 units**	**San-T Development Corp.** 10769 Woodside Ave. Santee, Calif. 92071 M. L. Lawrence, Art Thompson	This privately held company in calendar 1989 built and sold 1652 single-family detached houses, condominiums and apartments. The firm's gross revenue was $163,500,000
86 **$163,395**	136	**188** **553 units**	**GlenFed Development Corp.** 16601 Ventura Blvd. Encino, Calif. 91436 Terry Hess and Mel Wynn	In calendar 1989, this subsidiary of Glendale Federal Bank built and sold 419 single-family detached houses for $87,558,465 and 134 single-family attached houses for $25,967,393. Land sales of $49,869,500 provided the remainder of the firm's volume. Detached houses average 2200 sq. ft. in size and sold for an average price of $250,000. Attached houses average 1600 sq. ft. in size and sold for an average price of $180,000. Buyers were 45% young marrieds, 20% families, 15% singles, and 10% each empty nesters and retirees. Firm employs more than 100 people and subcontracts all of its construction work. Firm is active exclusively in Calif.
87 **$161,515**	72	**156** **739 units**	**Lycon Group** 15303 Ventura, Ste. 1000 Sherman Oaks, Calif. 91403 Robert J. & Dale Francescon	This privately held company in calendar year 1989 built and sold 22 single-family detached houses for $31,020,000. The company also built 717 apartments held for its own investment and valued at $85,380,000. Other income came from land sales of $4,650,000 and rental income and management fees of $16,200,000. Income property sales of $24,265,000 provided the remainder of the firm's dollar volume. Detached units average 6500 sq. ft. and size and sold for an average price of $1,410,000. Apartments average 950 sq. ft. in size and rented for an average of $1100 a month. The company builds exclusively in Calif.
88 **$161,127**	74	**186** **573 units**	**Homestead Land Development** 979 Broadway Millbrae, Calif. 94030 Jerry A. Finch	In calendar 1989 this subsidiary of Homestead Savings and Loan, Millbrae, Calif., built and sold 573 single-family detached houses for $88,670,000. Other income came from $52,864,000 in land sales, $18,524,000 in rental income and management fees and interest and other income of $1.069,000. Detached houses average 1800 sq. ft. and sold for an average price of $157,000. The company employs more than 100 people and subcontracts all of its construction work. Firm is active exclusively in Calif.
89 **$160,979**	97	**61** **1816 units**	**Calmark Development Corp.** 1990 S. Bundy Dr. 2nd Fl. Los Angeles, Calif. 90025 John M. Huskey	In fiscal year ended 1/31/90, this privately held subsidiary of Calmark Properties Inc., built and sold 220 single-family detached houses for $50,000,000 and 349 single-family attached houses for $25,504,000. The company also built 1247 apartments for its own investment valued at $83,500,000. Rental income and management fees generated another $1,975,000. Subsidiaries include Calmark Multi-Housing Inc., which builds senior apartments, and Calmark Homes, which builds single-family houses. Apartments average 600 sq. ft. in size and rent for an average of $600 a month. Home buyers are 63% families, 17% empty nesters, 10% retirees and 5% each singles and young marrieds. Company is active in Calif. (80%) and Nev. (20%).
90 **$160,940**	152	**82** **1373 units**	**DiVosta & Company** 10358 Riverside Drive Palm Beach Garden, Fla. 33410 Otto B. DiVosta	Formerly known as Burg & DiVosta, this privately held company in calendar 1989 built and sold 802 single-family detached houses for $115,768,000 and 571 single-family attached houses for $45,172,000, which accounted for the firm's total dollar volume. Detached houses average 1800 sq. ft. and sold for an average price of $144,000. Attached houses average 1250 sq. ft. in size and sold for an average price of $79,100. Company is active exclusively in Fla.
91 **$160,108**	188	**153** **755 units**	**Kimball Hill Inc.** 5999 New Wilke Rd. Rolling Meadows, Ill. 60008 David K. Hill Jr.	In calendar 1989 this privately held company built and sold 225 single-family detached houses for $57,098,000 and 530 single-family attached houses for $94,962,500. Other income came from land sales of $3,900,000 and rental income and management fees of $4,147,500. Detached houses average 2548 sq. ft. in size and $230,000 in price. Attached houses average 1401 sq. ft. in size and $124,000 in price. Buyers are 30% families, 25% each singles and young marrieds, and 10% each empty nesters and retirees. Previously building only in Ill., the company has expanded its activity into Houston, Texas.
92 **$159,539**	117	**95** **1236 units**	**Barnett-Range Corp.** P.O.Box 8189 Stockton, Calif. 95208 Hal W. Barnett	This privately held company in calendar 1989 built and sold 320 single-family detached houses for $47,459,500. The company also built 916 apartments for investors for $110,911,000. Rental income and management fees generated an additional $1,168,500. Detached houses average 2000 sq. ft. in size and sold for an average price of $190,000. Apartments average 1000 sq. ft. in size and rented for an average of $1080 a month. The company has more than 100 employees and subcontracts between 81% and 99% of its construction work. Company builds exclusively in Calif.

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GBW Properties makes debut among Giants; Picerne builds over 2000 apartments in 1989

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
93 **$158,580**	141	**73** **1568 units**	**Forecast Group** 10670 Civic Center Dr. Rancho Cucamonga, Calif. 91730 James P. Previti	This privately held company in calendar year 1989 built and sold 1257 single-family detached homes for $134,593,000. Also included are 311 apartments built for the firm's own investment for $18,500,000, land sales of $3,950,000 and rental income and management fees totalling $1,537,000. The average single-family home built by the firm contained 1325 sq. ft. and sold for $108,000. Rental units average 980 sq. ft. and rented at $625 per month. Fully 95% of its activity is in Calif., the rest in Ariz. Formed a new group last year, Forecast Homes of Northern California, to facilitate its diversification into that area. Nearly half (45%) of Forecast's sales were to families with children, with 22.5% to singles and 21% to young marrieds with no children. Empty nesters (5%) and retirees (6.5%) round out the market. Forecast subcontracts more than 80% of its construction work and has more than 100 permanent employees.
94 **$157,300**	84	**211** **471 units**	**Dividend Development Corp.** 3600 Pruneridge Ave. Santa Clara, Calif. 95051 Douglas Watson	In calendar 1989 this privately held company built and sold 471 single-family detached houses for $113,400,000. Non-residential construction generated $6,200,000. Other income came from land sales of $32,600,000 and rental income and management fees of $5,100,000. Company is active in Calif. (93%) and Ariz. (7%).
95 **$156,002**	115	**98** **1184 units**	**Weekley Homes Inc.** 1300 Post Oak Blvd. Houston, Texas 77056 David M. Weekley	In calendar 1989 this privately held company built and sold 1184 single-family detached houses for $156,002,000, which accounted for all of the firm's sales volume. Houses sold for an average price of $132,000. Buyers were 75% families, 10% young marrieds and 5% each singles and retirees. The firm employs more than 100 employees and subcontracts between 41% and 60% of it construction work. Company operates exclusively in Texas.
96 **$156,000**	—	**101** **1160 units**	**GBW Properties** 520 S. Lafayette Park Pl. Los Angeles, Calif. 90057 Jay H. Wilton	In calendar 1989 this privately held company built 1160 apartments for its own investment valued at $108,000,000. Non-residential construction added volume of $25,000,000. Rental income and management fees totaled $35,500,000. Apartments average 790 sq. ft. and rent for an average $855 a month. Renters are 42% singles, 35% young marrieds, 15% families and 8% empty nesters. Company operates exclusively in Calif.
97 **$150,600**	67	**140** **814 units**	**Kaplan Organization** 3100 Woodbridge Ave. Edison, N.J. 08818-2910 Michael Kaplan	In calendar 1989 this privately held company built and sold 70 single-family detached houses for $17,500,000 and 130 single-family attached houses for $19,300,000. The company also built 40 apartments for its own investment valued at $4,400,000. The manufacture of 574 single-family and multifamily modular units provided $19,900,000. Non residential construction contributed $67,700,000. Rental income and management fees generated $21,800,000. Detached houses average 2200 sq. ft. in size and sold for an average price of $250,000. Attached houses average 1060 sq. ft. in size and sold for an average price of $160,000. Condos average 1024 sq. ft. in size and sold for an average price of $100,000. Buyers were families (40%), young marrieds (20%), empty nesters (20%), singles (10%) and retirees (10%). The firm employs more than 100 people and subcontracts between 81% and 99% of its construction work. Company builds in N.J. (75%), N.Y. (20%) and Md. (5%).
98 **$150,000**	149	**50** **2341 units**	**Picerne Properties** 75 Lambert Lind Highway Warwick, R.I. 02886 Ronald R.S. Picerne	This privately held company in calendar 1989 built and sold 46 single-family detached houses for $8,700,000. The company also built 2295 apartments for its own investment valued at $137,700,000. Rental income and management fees generated $4,300,000. Detached houses average 2000 sq. ft. in size and sold for an average price of $187,000. Apartments average 900 sq. ft. in size and rent on average for $700 a month. Buyers were 70% families, 20% young marrieds, and 5% each empty nesters and singles. Subsidiaries include Picerne Development Corp., Winter Park, Fla., and Picerne Development Corp., Phoenix. Both firms are multifamily developers. The company employs more than 100 people and subcontracts all of its construction work. Firm is active in Fla. (60%), Ore. (15%), Wash. and Nev. (10% each), and R.I. (5%).
99 **$143,297**	95	**249** **372 units**	**Fralin and Waldron Inc.** P.O. Box 20069 Roanoke, Va. 20069 Elbert Waldron, Horace Fralin	In calendar 1989 this privately held company built and sold 38 single-family detached houses for $4,612,000. The company also built 334 apartments for its own investment valued at $15,992,600. Three remodeling and rehabilitation jobs brought in $51,400. Non residential construction generated $18,978,400. Other income came from land sales of $632,000, rental income and management fees of $42,400,000 and income from nursing homes and retirement centers of $60,631,200. Detached houses average 1900 sq. ft. in size and sell for an average price $122,000. Apartments average 900 sq. ft. in size and rent for an average of $500 a month. Sales were to families (50%), young marrieds (35%), singles (10%), and empty nesters (5%). The firm employs more than 100 people and subcontracts between 81% and 99% of its construction work. The company builds exclusively in Va.
100 **$141,650**	92	**224** **431 units**	**James Lewis Corp.** 1301 Lancaster Ave. Berywn, Pa. 19312 Lewis J. Brandolini III	This privately held company in calendar 1989 built and sold 235 single-family detached houses for $64,300,000 and 146 single-family attached houses for $24,100,000. The company also built and sold 50 apartments to investors for $3,000,000. Non-residential construction generated $25,000,000. Other income came from $20,000,000 in land sales, $250,000 in rental income and management fees, and $5,000,000 from such sources as residential brokerage sales volume. Subsidiaries are all located in Berwyn, Pa., and include First Strafford Corp., Daylesford Associates, and Baldwin Development Corp. Detached houses average 2400 sq. ft. in size and sold for an average price of $235,000. Attached houses average 1600 sq. ft. in size and $150,000 in price. Condos average 1000 sq. ft. in size and $110,000 in price. Apartments average 1000 sq. ft. in size and rented for an average of $900 a month. Buyers were 85% families, 10% young marrieds, and 5% singles. The firm has between 11 and 20 employees and subcontracts between 81% and 99% of its subcontracting work. Company is active in Pa. (75%), Del. (15%) and N.J. (10%).
101 **$140,366**	113	**90** **1303 units**	**Drees Co.** 211 Grandview Dr. Covington, Ky. 41017 Ralph A. Drees	In fiscal year ended 3/31/90, this privately held company built and sold 771 single-family detached houses for $101,500,524 and 204 single-family attached houses for $21,058,920. The company also built 328 apartments to hold for its own investment valued at $12,831,467. Non-residential construction generated $760,000. Other income came from rental income and management fees of $4,016,204, and fee income for development for others of $199,100. First Equity Mortgage, Kenwood, Ohio, is a mortgage lending subsidiary. Detached houses average 2200 sq. ft. and sold for an average price of $131,648. Attached houses average 1800 sq. ft. in size and $103,230 in price. Apartments average 950 sq. ft. in size and rented for an average of $600 a month. Buyers were 45% families, 30% young marrieds, 10% each singles and empty nesters, and 5% retirees. The firm employees more than 100 people and subcontracts between 81% and 99% of construction work. The company is active in Ohio (40%), Texas (29%), Ky. (22%), and Ga. (9%).

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Dunmore moves up more than 100 notches; Palm Harbor manufactures 5655 homes

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
102 **$140,000 est.**	16	**97** **1200 units est.**	**General Development Corp.** 1111 S. Bayshore Dr. Miami, Fla. 33131 Charles J. Simons	In 1989, Professional Builder estimates that this publicly held company (NYSE) built and sold 1200 single-family homes for total revenues of $110,000,000. Also included in the total is an estimated $30,000,000 in non-residential construction. The firm filed for protection under Chapter 11 of the federal bankruptcy law in April as it tries to work itself out from under a financial and legal cloud. In March, General Development pleaded guilty to defrauding home buyers and announced a $100,000,000 restitution policy. Two former officers of the company are under indictment on criminal charges of fraud.
103 **$139,437**	175	**215** **462 units**	**Richmarr Construction Corp.** 1101 17th St. NW Washington, D.C. 20036 Richard A. Kirstein	This privately held corporation built and sold 332 single-family detached and attached units in 1989 for a total of $73,600,000. That total includes 160 detached units for $45,400,000 and 162 attached units at $28,200,000. Also included were 140 rental apartments built for investors at $20,400,000. The firm is also actively involved in the Capitol area in non-residential construction, having constructed non-res projects totaling $45,437,000 last year. The firm has more than 100 permanent employees.
104 **$138,672**	154	**88** **1318 units**	**Amrep Corp.** 10 Columbus Circle New York, N.Y. 10019 Lawrence T. Perlmutter	This publicly held company in calendar year 1989 built 715 single-family detached homes for $45,956,000 and an additional 55 attached for sale units at $3,477,000. Also included are 548 apartments built for its own investment at a cost of $42,000,000. Rounding out Amrep revenues for the year are land sales of $6,400,000, rental and management fees of $1,290,000, and distribution operations of its utility companies totaling $39,549,000. Single-family detached units averaged 1500 sq. ft. in size and $65,000 in price. Attached single-family homes averaged $70,000 for 1156 sq. ft. The average 1000 sq. ft. Amrep apartment rented at $550 per month. New Mexico accounted for 90% of the firm's activity, with Florida chipping in with 8% and the rest of the activity centered in Colorado. Subsidiary operations include Amrep Southwest, Inc., Amrep Southeast, Inc., and Amrepco. Amrepco employees number more than 100. The firm subcontracts more than 80% of its work.
105 **$137,034**	132	**281** **297 units**	**Custom Living Communities Inc.** 375 Route 24 Chester, N.J. 07930 Eugene J. Long	This privately held company in calendar year 1989 built 244 single-family detached homes for a total of $112,505,000 and an additional 53 single-family attached its for $8,144,000. Land sales accounted for the remaining $16,385,000. Of its volume, 75% was built in California, the remainder in New Jersey. Fully 65% of its volume sold to families with children, with 15% bought by singles and 10% by young marrieds with no children. The remaining 10% split between empty-nesters and retirees. The average single-family detached home built by the company contained 3000 sq. ft. and sold for $460,000. Attached units averaged 1000 sq. ft. and sold for $154,000. The firm employs more than 100 people.
106 **$137,000**	156	**55** **2000 units**	**Shelter Canadian Holdings Ltd.** 7 Evergreen Pl. Winnipeg, Man., Canada R3I2T3 Ami C. Thorsteinson	This privately held company in calendar year 1989 built 2000 rental apartments for investors at a cost of $120,000,000. The firm also reports rental income and management fees totaling $15,000,000. Two remodeling jobs generated $2,000,000 in sales. The average unit built last year contained 800 sq. ft. of space and rented at $585 per month. Operations include SCA Developments in the Minneapolis and Fla. markets, Shelter Development Corp. in Baltimore, and Shelter American Holdings in Dallas. Geographic distribution of activity is 20% in Fla., 30% in Md., 40% in Minn., and 10% in Ind. More than 80% of the firm's construction work is subcontracted and the firm has more than 100 full-time employees.
107 **$136,972**	78	**17** **5655 units**	**Palm Harbor Homes Inc.** 15301 Dallas Pkwy. Dallas, Texas 75248 Lee Posey	Privately held company in 1989 manufactured 5655 mobile homes. Company has mobile home plants in Ariz., Fla., N.C., Ala., Ohio and Texas. The Fla. operation accounts for 35% of the total volume. Others include Ariz. (14%), N.C. (11%), Ala. (12%), Ohio (11)% and Texas (17%). Mobile home sales to families with children account for 60% of the volume with the rest going to retirees.
108 **$136,941**	217	**63** **1768 units**	**Dunmore Homes Inc.** 2150 Professional Dr. Roseville, Calif. 95661 Sidney B. Dunmore	This privately held company built 766 detached single-family units for $76,704,000 in sales, and seven attached single-family units for $650,000. The firm also manufactured 995 pre-cut home packages for a total of $5,918,000. A total of $29,208,000 in non-residential work, $19,785,000 in land sales, $2,533,000 in rental income/management fees, and $2,143,000 generated by a plumbing contractor subsidiary rounds out the revenues reported by the firm. Home sales were predominantly to young marrieds without children (30%) and families with children (60%), although singles (3%), empty nesters (3%) and retirees (4%) also figured in the mix. The firm reports three subsidiary operations: Warren Lumber Co., and J.A. Plumbing Co., both in Sacramento, Calif., and a general contracting operation called SBD Inc. in Roseville. Operations are concentrated in Calif. (95%) and Nev.
109 **$136,787**	138	**149** **769 units**	**Paragon Homes Inc.** 1448 15th St. Santa Monica, Calif. 90404 Irwin E. Garfield	This privately held company in calendar year 1989 completed and sold 765 single-family detached homes for $123,919,822 and four attached single-family units for $618,000, all in Calif. For the same period the firm reports $1,220,000 in non-residential construction, $10,161,617 in land sales, and income of $867,459 from rental income and management fees. The average single-family detached unit built by Paragon contained 1533 sq. ft. and sold for $160,000. The attached units, all condominiums, average 1191 sq. ft. in size at a sales price of $144,543. Primary target market was families with children, accounting for 47% of units sold. Other markets include young marrieds without children (23%), singles (19%), empty-nesters (8%), and retirees (3%). Virtually all of its construction is sub-contracted and the firm employs between 20 and 50 people full-time.

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Leisure Technology to develop $200 million active adult community with Japanese funding

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
110 **$133,783**	91	**254** **359 units**	**Stanley Martin Cos. Inc.** 8000 Towers Crescent Dr. Vienna Spring, Va. 22182 Martin K. Alloy	A privately held company, this firm reported building and selling 136 single-family detached units for $57,485,607 and 223 single-family attached units for $37,865,373 in the fiscal year ended March, 1990. Also included in total revenues are non-residential construction (primarily warehouses, office buildings and medical buildings) totaling $6,800,000; land sales of $16,227,000; rental income and management fees of $8,217,505; and income of $7,159,115 from interest, equipment rental and mortgage fees. The firm encompasses the operations of Heritage Mortgage Corp., Reston, Va.; Stanley Martin Commercial, Bethesda, Md.; and Stanley Martin Title, Vienna, Va. A typical Martin single-family detached home contains 3700 sq. ft. of space and sells for $325,000. Attached units run an average of 1700 sq. ft. and sell at $138,000. Primary markets are Va., which accounts for 88% of sales, and Md. More than 80% of work is subcontracted and the firm employs more than 100 people full-time.
111 **$133,655**	66	**121** **978 units**	**Calton Inc.** 500 Craig Rd. Freehold, N.J. 07728 Anthony J. Caldarone	A publicly-held company (NYSE), Calton reports for the fiscal year ended Nov. 30, 1989, the construction and sale of 518 single-family detached homes for $77,707,000. Also included are 460 attached single-family units valued at $50,167,000, land sales of $5,122,000, and rental and management income of $659,000. Detached units averaged $150,000 and attached units $109,000. The firm's markets include N.J. (46%), Fla. (20%), Pa. (23%), and Calif. (11%). Calton recently moved into the hot Sacramento, Calif. market. Employing more than 100 people, the firm subcontracts virtually all its construction activity.
112 **$132,690**	147	**187** **560 units**	**Gentry Homes Ltd.** P.O. Box 295 Honolulu, Hawaii 96809 Joseph J. Ramia	This privately held firm reports in calendar year 1989 that it built and sold 448 attached single-family units valued at $54,698,119 and 112 rental apartments totaling $13,673,280 for its own investment. Non-residential construction (warehouses, restaurants) was valued at $8,854,308. Other income included land sales of $36,097,558; rental income and management fees of $12,697,596; and other revenue (mainly from banking) of $6,673,007. Building units average 800 sq. ft. in size and $122,083 in price. The firm does virtually all of its business in the Aloha State (only 1.9% in Calif.). Families with children account for 85% of sales, with another 10% going to young marrieds with no children. Employing more than 100 people, the firm subcontracts more than 60% of its work.
113 **$130,829**	43	**130** **903 units**	**McKellar Communities** 1250 Prospect La Jolla, Calif. 92037 William F. Miller Jr.	The privately-held company in calendar year 1989 built and sold 903 single-family attached units valued at $58,119,233. The firm also reports $55,000,000 in non-residential construction—mainly office buildings—and $65,242,000 in land sales. Rental income and management fees brought an additional $2,433,000 and other undefined revenue totaled $5,035,000. The firm, which operates solely in Calif., sells mainly to singles (40%) and young marrieds with no children (25%). Other market segments include families with children (10%), empty nesters (15%), and retirees (10%). All of its construction is subcontracted and McKellar has more than 100 full-time employees.
114 **$128,800 est.**	94	**182** **590 units est.**	**Weingarten Siegel Group** 198 Route 9 Manalapan, N.J. 07726 Ned L. Siegel	Figures for this privately held company are estimated by *Professional Builder* to total 330 single-family detached units at $82,500,000 and 260 single-family attached units at $42,800,000, plus rental income and management fees of $3,500,000. Half of the firm's activity is estimated to be in N.J., with the rest evenly divided between Fla. and Calif.
115 **$128,700**	—	**340** **205 units**	**Habitat Co.** 405 N. Wabash Ave. Chicago, Ill. 60611 Daniel E. Levin	This privately-held company reports building and selling in calendar year 1989, 30 single-family attached units valued at $8,500,000. The firm also built 175 rental units for investors ($10,000,000) and another 904 high-rise rental apartments for its own investment at $97,500,000. A single $8,500,000 remodeling project swelled the total, as did $1,500,000 in non-residential construction and $2,700,000 in rentals and management fees. Condominiums built by the firm averaged 2030 sq. ft. and sold for $280,000. Rental units average 800 sq. ft. and rent for $960 per month. All of the company's activity is in the Chicago area. The firm subcontracts all work and employs more than 100 persons full-time.
116 **$127,000**	76	**44** **2457 units**	**Thomas P. Harkins Inc.** 12301 Old Columbia Pike Silver Spring, Md. 20904 Thomas P. Harkins	This privately-held company reports for the calendar year 1989 building and selling 629 single-family attached units and 1828 rental apartment units for investors. The firm also reports completing three remodeling/rehabilitation jobs. Most of its activity (70%) was in Md. The rest came in Va. (16%) and in Washington, D.C. (14%). More than 80% of construction is subcontracted and the firm employs more than 100 people full-time.
116 **$127,000**	—	**129** **905 units**	**Van Daele Development** 2900 Adams St. Riverside, Calif. 92504 Michael Van Daele	This privately held company reports that for calendar year 1989 it built and sold 705 single-family detached homes at a total of $106,000,000 and 200 rental units for its own investment at $13,000,000. The total also includes a $3,000,000 remodeling job as well as $5,000,000 in land sales. The average single-family home contained 1700 sq. ft. and sold for $150,000. Apartment units averaged 850 sq. ft. at a rental of more than $600 per month. All activity was in Calif., with three-quarters of the units aimed at families with children. The remainder of the market mix included young marrieds without children (10%), empty nesters (11%), and singles (4%). The firm employs between 50 and 100 people full-time and subcontracts all its construction work.
118 **$126,811**	83	**170** **652 units**	**Leisure Technology Inc.** 12233 West Olympic Blvd. Los Angeles, Calif. 90064 Michael L. Tenzer	This publicly held company (NYSE) built and sold in the fiscal year ended March 31, 1990, 199 single-family detached homes valued at $38,705,000 and 453 attached units at $86,106,000. The average detached unit contained 2700 sq. ft. of space and sold for $300,000. Attached units averaged 2000 sq. ft. in size at $200,000. The bulk of its activity, 80%, was in Calif. N.J. accounted for 10% of the volume with the remainder split evenly between Fla. and N.Y. The firm recently entered into a partnership with Hazama USA Corp. to develop a $200,000,000 active adult community called Leisure Oaks Escondido in Escondido, Calif. Development and construction financing for the project is expected to come from The Industrial Bank of Japan Ltd. The firm subcontracts all of its construction work and has more than 100 full-time employees.
119 **$125,696**	148	**126** **915 units**	**Friendswood/Village Builders** P.O. Box 2567 Houston, Texas 77001 Robert Bradley	This operating division of Exxon Co., USA, built and sold 915 single-family detached homes during calendar year 1989. Operating only in Texas, the firm's major target market is families with children (65%). Other market segments reached include young marrieds with no children (15%), empty-nesters (10%), with the remainder evenly split between retirees and singles. The average Friendswood house contained 2,600 sq. ft. of space at a price of $137,372. The firm employs 55 regular full-time persons and subcontracts all of its construction work.

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Strong building years vault West Venture, Coleman and Duffel Financial into higher rankings

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
120 $125,530	65	271 310 units	**Baldwin Co.** 16811 Hale Ave. Irvine, Calif. 92714 Alfred E. Baldwin	This privately held company reported during calendar year 1989 that it built 293 single-family detached units for $95,152,000 and another 17 attached units at $2,425,000. Figures also include $18,000,000 in non-residential construction (office and recreational buildings), $5,583,000 in land sales, and $4,370,000 in other income. Operating strictly in California, the firm employs more than 100 persons, and subcontracts more than 80% of its construction work.
121 $125,369	63	93 1254 units	**Cenvill Development Corp.** 1926 10th Avenue N. Lake Worth, Fla. 33417 Richard Siemens	The publicly-held company (AMEX) reported that for the 1989 calendar year, it built and sold 210 single-family detached units valued at $12,480,000 and 1044 single-family attached units with a value of $71,212,000. Also included were $615,000 in non-residential construction, $13,491,000 in land sales, and $2,471,000 in operating revenues and interest. Fully 90% of its activity was in Fla., the remainder in Ill. Seniors comprise the bulk of its market with 35% being empty-nesters and 50% being retirees. The remainder of Cenvill's buyers are families with children. Employing more than 100 persons full time, the firm subcontracts less than 40% of its construction work.
122 $125,251	127	19 5371 units	**Schult Homes Corp.** P.O. Box 151 Middlebury, Ind. 46540 Walter E. Wells	The publicly-held corporation (OTC) reports that for the fiscal year ended June 30, 1989, it manufactured and sold 5080 mobile homes worth $115,473,102, plus 291 moduler single-family units at $9,442,828. Other income totaled $335,539. The firm reports sales in all states except Calif., Hawaii, N.C., S.C., Ga., Fla., Ala., and Miss. It employs more than 100 persons full time.
123 $123,998	287	362 170 units	**Duffel Financial & Construction Co.** 3730 Mount Diablo Blvd. Lafayette, Calif. 94549 Joseph A. Duffel	This privately held company in calendar year 1989 built and sold 54 detached single-family homes for a total of $11,218,000 and 116 single-family attached units for $23,772,000. Also included was $22,173,000 in non-residential construction: shopping centers, office buildings and restaurants. Swelling revenue was $42,720,000 in land sales. Rentals from commercial buildings added $9,138,000. Rooms and related revenue from hotel properties accounted for $14,877,000. The average single-family detached unit contained 2100 sq. ft. with a price tag of $225,000. Attached units averaged 1800 sq. ft. at $210,000. Families with children comprised three-quarters of the market. Young marrieds with no children (15%) and retirees (10%) rounded out the mix. Strictly a Calif. builder, the firm employs more than 100 people, and subcontracts more than 80% of its construction activity.
124 $123,820	300	206 500 units	**West Venture Development Co.** 6345 Balboa Blvd. Encino, Calif. 91316 Robert Miller, Louis Berkowitz	This subsidiary of Walter Lawrence PLC of London, England, operates strictly in Calif. It reported that in calendar year 1989, it built and sold 500 single-family detached homes valued at $69,040,000. Also included in its total are $45,480,000 in shopping center construction and $9,300,000 in land sales. The average home contained 1681 sq. ft. of space and sold for $134,000. Appealing to a diverse market, the firm reports 39% of its sales are to families with children, 32% to young marrieds without children, 9% to singles, 13% to empty-nesters, and 7% to retirees. Employing more than 100 people full time, West Venture subcontracts all of its construction work.
125 $122,254	231	322 227 units	**Braddock & Logan Associates** 4155 Blackhawk Circle Danville, Calif. 94506 Joseph E. Raphel	The privately held company reports that in calendar year 1989, it built and sold 111 single-family detached homes at $22,874,000 and 116 attached units valued at $23,490,000. Non-residential construction, in the form of warehouses and office buildings, accounted for an additional $6,650,000. The firm also reported land sales of $58,900,000. Rental income and management fees totaled $10,340,000. Operating in Calif., the firm sold 40% of its units to families with children and 30% to young marrieds without children. Singles accounted for 15% of the market, while empty-nesters and retirees split the remainder. More than 80% of the firm's work is performed by subcontractors. Braddock and Logan employs more than 100 persons full time.
126 $121,488	282	173 639 units	**Coleman Homes Inc.** P.O. Box 9336 Bakersfield, Calif. 93389 Thomas Coleman	This privately held company in calendar year 1989 built and sold 639 single-family detached houses for a sales volume of $91,488,000. Rental income and management fees generated another $30,000,000. The single-family detached houses averaged 1800 sq. ft. in size and sold for an average price of $143,175. More than half the sales were to families with children (55%); 15% of buyers were empty nesters; 10% each were singles, young marrieds and retirees. Firm is active in Calif. (55%) and Nev. (45%).
127 $121,385	146	66 1728 units	**Tompkins Investment Group** 1637 E. Vine St. Kissimmee, Fla. 32743 Thomas N. Tompkins	This privately held company in fiscal year (ended 1/31/90) built and sold 1032 single-family detached houses for a sales volume of $88,752,000. The firm also built 392 apartment units for investors with a sales volume of $17,300,000. The company built and held for its own investment another 304 apartment units valued at $12,900,000. Land sales of $9,406,800, rental income and management fees of $992,299, and interest of $4,934,105 generated the rest of the company's income. Detached units averaged 1400 sq. ft. in size and $86,000 in price. Apartments averaged 1043 sq. ft. The company is active solely in Fla.
128 $120,100	210	220 444 units	**Douglas Allred Co.** 1660 N. Hotel Circle Dr. San Diego, Calif. 92108 Douglas O. Allred	This privately held company in fiscal year (ended 11/30/89) built and sold 16 single-family detached houses for $1,400,000 and 44 single-family attached houses for a sales volume of $6,200,000. The company also built 384 apartments held for its own investment and valued at $32,200,000. Non-residential construction accounted for $37,200,000. Other income came from land sales of $16,600,000 and rental income and management fees of $26,500,000. Detached units averaged 1450 sq. ft. and sold for $135,000. Attached units averaged 1050 sq. ft. and sold for an average price of $120,000. Apartments averaged 800 sq. ft. in size and rent for $775 a month. Sales were primarily to young marrieds (75%); 15% of buyers were empty nesters, and 10% were families. Firm is active exclusively in Calif.
129 $119,100	157	296 277 units	**Cooper Communities Inc.** 1 Sunset Drive Bella Vista, Ark. 72714 Larry B. Cooper	This privately held company in calendar year 1989 built 223 single-family detached houses that sold for $24,300,000 and 54 single-family attached houses that sold for $6,800,000. Non-residential construction generated $6,000,000. Land sales added $52,000,000. Other income included $30,000,000 generated from Cooper Shares and building material resale. Detached units had an average sales price of $109,000. Attached units average 1700 sq. ft. in size and sold for an average price of $124,000. Buyers are 75% retirees, 15% families and 10% empty nesters. The company is active in Ark. (64%), Tenn. (32%) and S.C. (4%).

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
130 **$118,305**	200	**184** 578 units	**Torino Construction Corp.** 24050 Madison St. Torrance, Calif. 90505 Francis P. Torino	This privately held company in calendar 1989 built and sold 72 single-family detached houses for $17,479,500 and 39 single-family attached houses for $5,967,550. The company also built 467 apartment units for its own investment valued at $18,986,120. Non-residential construction generated $30,817,260. Land sales of $28,570,050 and rental income and management fees of $12,976,350 added to the bottom line. Other income came from interest plus architectural/other fees amounting to $3,508,200. Detached units averaged 2350 sq. ft. and sold for $250,000; attached units averaged 900 sq. ft. and sold for $153,000. Apartments averaged 900 sq. ft. and rented for an average of $800 a month. Sales were 33% to empty nesters, 26% each to families and retirees, 11% to singles and 4% to young marrieds. The company is active in Nev. (87%), Calif. (8%) and Ariz. (5%).
131 **$117,693**	290	**136** 837 units	**John Laing Homes Inc.** 23382 Mill Cree Laguna Hills, Calif. 92653 Robert E. Fritts	For calendar year 1989 this subsidiary of John Laing PLC built and sold 665 single-family detached houses for $101,203,000 and 172 single-family attached houses for $16,490,000. This accounted for the firm's entire sales volume. Detached houses averaged 1850 sq. ft. in size and sold for an average price of $152,185. Attached houses averaged 650 sq. ft. in size and sold for an average price of $95,872. The firm is active exclusively in Calif.
132 **$116,591 est.**	123	**160** 724 units est.	**Emerald Homes L. P.** 5333 N. 7th St. Phoenix, Ariz. 85014 Philip J. Polich	This publicly held company is a master limited partnership traded on the New York Stock Exchange. In calendar 1989 the company built and sold an estimated 724 single-family detached houses for an estimated sales volume of $105,202,000. Other revenues came from an estimated $10,325,000 in land sales and $1,064,000 in other income.
133 **$115,800**	—	**164** 693 units	**John M. Corcoran & Co.** 500 Granite Ave. Milton, Mass. 02186 John M. Corcoran	In calendar 1989 this privately held company built 693 apartments for its own investment valued at $56,000,000. Construction of an 80,000 sq. ft. office building added sales volume of $4,300,000. Rental income and management fees generated $55,500,000. Apartments averaged 900 sq. ft. in size. The company built a 220-apartment complex in Andover, Mass., of masonry and precast forms. Another project in Conn. involved converting an old carpet mill into 473 apartments. The company is active in Conn. (70%) and Mass. (30%).
134 **$114,011**	—	**236** 408 units	**Akins Development Co.** 5 Park Plaza. Ste. 400 Irvine, Calif. 92714 Bruce K. Akins	This privately held company in calendar year 1989 built and sold 305 single-family detached houses for $96,579,000 and 103 single-family attached houses for $10,300,000. Non-residential construction added $1,050,000. Other income came from rental income and management fees of $5,744,000 and investment income of $338,000. Detached houses averaged 2220 sq. ft. in size and sold for an average price of $257,000. Attached units averaged 1265 sq. ft. and sold for $168,000. Company is active exclusively in Calif.
135 **$112,700**	151	**216** 459 units	**Anastasi Construction Co.** 1200 Aviation Blvd. Redondo Beach, Calif. 90278 Wayne G. Anastasi	This privately held company in calendar 1989 built and sold 68 single-family detached houses for $11,270,000 and 208 single-family attached houses for $33,810,000. The company also built 183 apartment units for its own investment valued at $67,620,000. Residential construction accounted for the company's entire dollar volume. Detached units averaged 3900 sq. ft. and sold for an average price of $725,000. Attached units averaged 2300 sq. ft. in size and sold for an average price of $380,000. The apartments average 850 sq. ft. in size and rented for between $700 and $750 a month. Buyers were 60% young marrieds, and 20% each singles and families. Company is active exclusively in Calif.
136 **$111,817**	140	**199** 528 units	**Hoffman Homes** 300 Park Blvd. Itasca, Ill. 60143 Norman M. Hassinger Jr.	In fiscal year (ended 11/30/89) this privately held company built and sold 270 single-family detached houses for $66,359,300 and 258 single-family attached houses for $41,875,100. Other income came from land sales of $3,582,300. Hoffman Homes is one of The Hassinger Companies. Sister companies include Illinois Home Mortgage Corp., Richland Development (active in land sales and purchase), and Portfolio Homes by Hoffman, a custom home builder. Detached houses average 2500 sq. ft. in size and have an average sales price of $212,500. Attached houses average 1650 sq. ft. in size and have an average sales price of $165,500. Company is active exclusively in Ill.
137 **$111,772**	107	**238** 402 units	**Silver Cos.** P.O.Box 7566 Fredericksburg, Va. 22404 Larry Silver, Edward Minniear Jr.	This privately held company in calendar 1989 built and sold 97 single-family detached houses for $9,198,881 and 165 single-family attached houses for $16,739,915. The company also built 140 apartment units for is own investment valued at $7,454,000. The company did $27,653,085 in non-residential construction. Land sales added $28,371,902. Rental income and management fees added $11,101,922. Other income of $11,252,097 came from such sources as interest, hotel/motel revenues, building material sales, and dividend income from stocks. The company has 14 subsidiaries engaged in residential construction, commercial development and leasing, hotel operations and property management. It is active 95% in Va. and 5% in S.C.
138 **$111,652**	119	**91** 1292 units	**Embrey Associates Inc.** 750 E. Mulberry St. San Antonio, Texas 78212 Walter Embrey Jr.	This privately held company in calendar 1989 built 1292 apartment units for its own investment valued at $83,980,000. Other income came from $12,550,000 in non-residential construction, $12,969,813 in rental income and management fees and $2,152,271 in development fees. Apartments average 800 sq. ft. in size and rent for an average of $0.80 per sq. ft. a month. The firm subcontracts between 81% and 99% of its work and has a staff of between 51 and 100 people. Subsidiaries include Trinity Asset Management in San Antonio, Texas, a commercial management company. The company is active in Fla. (30%), Md. (30%), Ind. (15%), Wis. (15%) and Ill. (10%).
139 **$111,619**	242	**303** 262 units	**R. B. McComic Inc.** 4920 Carroll Canyon Rd. San Diego, Calif. 92121 Gary Copson	This privately held company in calendar 1989 built 262 single-family detached houses and sold them for $101,619,000. The houses averaged 2500 sq. ft. in size and sold for an average price of $388,000. Land sales generated $10,000,000. The company has been primarily a Calif. single-family home builder. This last year, it began diversification into a hotel in Colo. and seniors projects. Subsidiary is Boulder Creek Co.

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Diversified Homes proves to be aptly named with its mix of detached, attached and panelized units

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
140 **$110,700**	71	**112** 1014 units	**Holtzman & Silverman Cos.** 30633 Northwestern Hwy. Farmington Hills, Mich. 48018 Gilbert "Buzz" Silverman & Jonathan Holtzman	In calendar 1989 this privately held company built and sold 44 single-family detached houses for $4,198,000 and 110 single-family attached houses for $3,380,000. The company also built 860 apartments for its own investment with a market value of $26,788,000. Other income came from land sales of $1,261,000, rental income and management fees of $73,601,000, revenue from a communications company of $1,221,000, and revenue from a securities company of $289,000. Subsidiaries include Village Green Management Co., Holtzman & Silverman Development Co., and Holtzman & Silverman Securities. The last is involved in real estate finance. Detached houses average 1500 sq. ft. and sell for $100,000; attached houses average 1300 sq. ft. and sell for $145,000. Apartments average 975 sq. ft. and rent for $650 a month. Buyers are young marrieds (45%), families (37%), singles (15%), and empty nesters (3%). Though the company has been active exclusively in Mich., this year it plans expansion into other Great Lakes states.
141 **$110,600**	125	**13** 5946 units	**Horton Homes Inc.** P.O.Box 581 Eatonton, Ga. 31024 N.D. Horton Jr.	This privately held company in calendar 1989 manufactured and sold 5600 mobile homes for $102,000,000 and 346 single-family modular units for $7,800,000. Non-residential construction brought in revenues of $500,000. Other income came from land sales of $200,000 and rental income and management fees of $100,000. The manufactured housing averages 1200 sq. ft. in size and $26,000 in price. The company is active in Ga. (37%), N.C. (18%), S.C. (15%), Tenn. (10%), Fla. (10%), Ala. (6%), Va. (3%) and Miss. (1%).
142 **$109,841**	139	**15** 5749 units	**Commodore Corp.** P.O. Box 577 Goshen, Ind. 46526 Thomas L. Underwood	This privately held company in calendar 1989 manufactured and sold 5749 mobile homes for $109,841,139 which accounted for all of the company's volume. Homes average 1100 sq. ft. and sell for an average price of $19,106. There are six Commodore subsidiaries including Commodore Homes of Pennsylvania, of Virginia, and of Indiana, as well as Frontier Homes, Brookwood Homes and Colony Factory Crafted Homes. All manufacture mobile homes. The company is active in Pa. (50%), Ind. (25.3%), Ala. (13.6%) and Va. (11.1%).
143 **$109,688**	179	**89** 1308 units	**Diversified Homes** 10015 Old Columbia Rd. Columbia, Md. 21046 Kenneth W. Carlson	In calendar 1989 the privately held company built and sold 486 single-family detached houses for $75,564,373 and 168 single-family attached houses for $18,859,994. The company also produced and sold 392 single-family panelized units for $5,026,617 and 282 multifamily panelized units for $1,639,022. Other income came from land sales of $7,160,376 and mortgage company income of $1,437,292. Subsidiaries include Diversified Land Corp. and Diversified Mortgage Corp., both of Columbia, Md., and Diversified Building Systems Corp of Jessup, Md. Detached houses average 2200 sq. ft. and sell for $162,155. Attached units average 1200 sq. ft. with an average sales price of $112,262. Half of the buyers are families, 20% are young marrieds, 15% empty nesters, 13% retirees, and 5% are singles. Company is active in Md. (62.5%), Fla. (32.9%) and Va. (4.7%).
144 **$108,376**	128	**203** 522 units	**Larwin Construction Co.** 16255 Ventura Blvd. Encino, Calif. 91436 Michael I. Keston	In calendar 1989 this privately held company built and sold 410 single-family detached houses for $80,680,130 and 112 single-family attached houses for $6,830,000. Non-residential construction generated $9,893,000. Other income came from land sales of $4,150,000 and rental income and management fees of $6,822,395. Detached houses average 2000 sq. ft. and sell for an average price of $216,000. Apartments average 900 sq. ft. and rent on average for $800 a month. Company is active exclusively in Calif.
145 **$107,520**	150	**320** 229 units	**Edward R. Carr & Assoc.** 7535 Little River Turnpike Annandale, Va. 22003 Edward R. Carr	In calendar 1989 this privately held company built and sold 15 single-family detached houses for $6,160,000 and 214 single-family attached houses for $44,320,000. Non-residential construction generated $12,000,000. Other income came from land sales of $26,000,000 and rental income/management fees of $19,040,000. Company is active exclusively in Va.
146 **$107,485**	90	**228** 421 units	**Milton Co.** 1430 Springhill Rd. McLean, Va. 22102 Milton Schneiderman	This privately held company in fiscal year (ended 1/31/90) built and sold 60 single-family detached houses for $14,000,000 and 361 single-family attached houses for $61,282,000. Land sales generated another $32,203,000 in revenues. Detached houses averaged 2800 sq. ft. in size and $300,000 in price; attached houses averaged 2000 sq. ft. in size and $220,000 in price. Condos averaged 1000 sq. ft. in size and sold for an average price of $110,000. Buyers were 30% young marrieds, 25% each families and singles, and 20% empty nesters. Company is active in Va. (60%) and Md. (40%).
147 **$107,170**	387	**165** 691 units	**Crowell Industries Inc.** 1425 W. Foothill Blvd. Upland, Calif. 91786 Harry C. Crowell	This privately held company in calendar 1989 built and sold 345 single-family detached houses for $44,780,000. The company also built 346 apartment units for its own investment with a value of $18,000,000. Non-residential construction added another $1,350,000. Additional income came from land sales of $15,360,000, rental income and management fees of $2,110,000, and other miscellaneous income of $25,570,000. Detached houses averaged 1500 sq. ft. in size and sold for an average price of $130,000. Apartments averaged 700 sq. ft. in size and rented on average for $535 a month. Buyers are 25% each families, empty nesters and retirees; 15% are singles and 10% of buyers are young marrieds. Company builds exclusively in Calif.
148 **$107,100**	124	**263** 340 units	**Meeker Development Company** 19100 Von Karmen Irvine, Calif. 92715 George R. Meeker,Jr.	This privately held company (formerly called California Communities) in calendar 1989 built and sold 340 single-family detached houses for $105,000,000. The rest of the company's income came from land sales of $2,100,000. The single-family houses averaged 2515 sq. ft. in size and sold for an average price of $351,000. Buyers were 62% families, 16% young marrieds, 12% retirees, 8% empty nesters and 2% singles. Company is active exclusively in Calif.
149 **$107,000**	—	**396** 20 units	**Olympia/York** 210 Pelham Rd. New Rochelle, N.Y. 10805 Charles Gazzola	This privately held company in calendar 1989 built and sold 20 single-family attached houses for $14,000,000. These houses average 2800 to 3200 sq. ft. Fourteen major remodeling and rehabilitation jobs generated another $93,000,000. The company has two subsidiaries: Olympia Tile, Toronto, is a tile supply company. Oly Devcon is a New York City-based general contracting subsidiary building shopping centers, office buildings, retail stores and restaurants, that generates tremendous volume for the firm in non-residential construction. That company is working in such far-flung places as Moscow and Japan. Overall, the company is active in London (30%), New York (25%), the U.S.S.R. (15%); and Calif., Fla., and Japan (10% each).

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Australian-owned Hooker Homes liquidates, while the French-owned Premier Group prospers

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
150 **$106,700**	102	**132** 869 units	**L.J. Hooker Homes** 6000 Live Oak Parkway Norcross, Ga. 30093 Peter Joyce	In calendar 1989 the company built and sold 869 single-family detached homes for a sales volume of $106,700,000. In August, 1989, the company filed for federal bankruptcy to protect itself from creditor lawsuits while it worked out a plan to pay its debts. L.J. Hooker's parent company, Sydney, Australia-based Hooker Corp., Ltd., is currently managed by a court-appointed liquidator. In January, 1990, a consortium of investors first tendered and then withdrew an offer to pay $409 million for various company assets. Among the company's holdings were shopping centers in Cincinnati, Columbia, S.C., and Thornton, Colo., as well as an unfinished office building in Atlanta. The company also owned the Bonwit Teller department store chain. The company was active in home building in Ariz., Fla., Ga., Va., and Texas.
151 **$106,355**	163	**26** 3497 units	**Oakwood Homes Corp.** P.O.Box 7386 Greensboro, N.C. 27407 Nicholas J. St. George	In fiscal year ended 9/30/89, this publicly held company traded on the New York Stock Exchange manufactured and sold 3497 mobile homes for $76,532,000. Other income came from rental income and management fees of $2,000,000 and financial services, insurance and investment income of $27,823,000. Of total dollar volume 3.7% was net income. The company has three subsidiaries: Oakwood Mobile Homes Inc., Greensboro, N.C., Homes by Oakwood, Richfield, N.C., and Oakwood Land Development, Greensboro, N.C. Homes average 940 sq. ft. and sell for an average price of $20,900. The company employs more than 100 people and does not subcontract any of its work. The company operates exclusively in the southeast.
152 **$105,932**	219	**378** 130 units	**Raznick & Sons Inc.** 5525 Oakdale Ave. Woodland Hills, Calif. 92364 Aaron L. Raznick	This privately held company in calendar 1989 built and sold 130 single-family detached houses for $67,690,000. Non-residential construction generated another $3,325,000. Other income came from land sales of $31,304,000 and rental income and management fees of $3,613,000. Detached houses average 2500 sq. ft. The company operates exclusively in Calif.
153 **$105,760**	186	**197** 531 units	**Premier Group Inc.** 4685 MacArthur Ct. Newport Beach, Calif. 92660 Pierre Le Pendeven	In calendar 1989 this subsidiary of Les Nouveaux Constructeurs, Paris, France, built and sold 531 single-family detached houses for $91,000,000. Non-residential construction generated another $14,000,000. Loan origination fees added $760,000 to the company's revenues. Subsidiaries include Premier Business Properties, Irvine, Calif., a commercial development company; Premier Homes, Corona, Calif., and Premier Homes, Palmdale, Calif. Houses average 2240 sq. ft. and sell for an average price of $171,400. Buyers are 50% families, 25% young marrieds, 10% each singles and retirees and 5% empty nesters. Company is active exclusively in Calif.
154 **$104,500**	109	**388** 55 units	**Heritage Dev. Group** Heritage Village Southbury, Conn. 06488 Henry J. Paparazzo	This privately held company in calendar 1989 built and sold 55 single-family attached houses for $16,500,000. Construction of 20 high-rise residential units generated $5,000,000. Non-residential construction added $13,000,000. Other income came from land and other real estate sales of $22,000,000, rental income and management fees of $5,500,000 and recreation utilities and other commercial operations that generated $42,500,000. Attached houses averaged 1600 sq. ft. in size and sold for an average price of $300,000. Condos averaged 1200 sq. ft. in size and sold for an average price of $250,000. Buyers were 65% empty nesters, 20% retirees, 10% singles and 5% young marrieds. Company is active in N.Y. (70%) and Conn. (30%).
155 **$104,346 est.**	75	**163** 700 units est.	**Foreston Development** 5 Dakota Dr. Lake Success, N.Y. 11042 Jack C. Heller	In calendar 1989 this subsidiary of Foreston Group, Lake Success, N.Y., built and sold an estimated 700 housing units which accounted for all of the development company's estimated revenues. Product included single-family detached, single-family attached and apartments that the company built and held for its own portfolio.
156 **$103,950**	135	**135** 843 units	**Evans Withycombe Inc.** 4455 E. Camelback Road, Ste. 220 B Phoenix, Ariz. 85018 Stephen O. Evans	This privately held company in calendar 1989 built and sold 25 single-family detached houses for $5,500,000 and 10 single-family attached houses for $1,100,000. The company also built for investors and sold 96 apartment units for $4,300,000. The company also built 712 apartments held for its own investment and valued at $35,600,000. Three remodeling and rehabilitation jobs added $750,000 to the company's revenues. Rental income and management fees generated $56,700,000. Detached units average 2000 sq. ft. and sold for an average price of $180,000. Attached units averaged 1300 sq. ft. in size and $100,000 in price. Apartments averaged 950 sq. ft. in size and rented for an average of $600 a month. Buyers were 35% young marrieds, 20% each empty nesters, families and retirees and 5% singles. Company is active exclusively in Ariz.
157 **$103,500**	187	**62** 1808 units	**Dominion Developments** 5911 Orchard St. W Tacoma, Wash. 98467 J. David Page	This privately held company in calendar 1989 built and held for its own investment 1808 apartments with a value of $103,500,000. This apartment construction accounted for all of the companies 1989 revenues. Units averaged 910 sq. ft. in size and rented for an average of $525 a month. The company is active in Wash. (41%), Ore. (29%), Nev. (18%), and Calif. (12%).
158 **$103,382**	105	**104** 1092 units	**Oriole Homes Corp.** 1151 N.W. 24th St. Pompano Beach, Fla. 33064 Richard D. Levy	In calendar 1989 this publicly held corporation traded on the American Stock Exchange built and sold 122 single-family detached houses for $20,291,554 and 770 single-family attached houses for $70,241,471. The company also built 200 apartments held for its own investment and valued at $9,000,000. Other income came from land sales of $5,920,659 and other operating revenues of $6,928,458. The percent of dollar volume that was net income was 7.29%. Buyers are 75% retirees and 25% families. Company is active exclusively in Fla.
159 **$103,312**	134	**114** 1008 units	**Beazer Properties Inc.** 945 East Paces Ferry Road Atlanta, Ga. 30326 Jerald Cohn	In calendar 1989 this subsidiary of Beazer PLC, Bath, England, built and sold 1008 single-family detached houses for $95,206,000. Other income came from land sales of $4,064,000 and rental income and management fees of $4,042,000. Subsidiaries include Cohn Communities Inc., Atlanta, Phillips builders Inc., Nashville, Tenn., and Squires Homes Inc. Charlotte, N.C. Houses averaged 1500 sq. ft. and sold for an average price of $94,450. Buyers were 33% families, 30% young marrieds, 25% singles, 7% empty nesters and 5% retirees. Company is active in N.C. (34%), Tenn. (27%), Ga. (25%) and S.C. (14%).

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Diversified FPA Corp. builds attached and detached product, mobile homes and high-rise units as well

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
160 **$102,888**	—	**158** **734** **units**	**Pacesetter Homes Inc.** 4540 Campus Dr. Newport Beach, Calif. 92660 Landon Exley	This publicly held company traded on the Pacific NSDQ exchange in calendar 1989 built and sold 404 single-family detached houses for $67,633,000. The company also built 330 apartments for its own investment valued at $31,000,000. Other income came from land sales of $610,000, rental income and management fees of $1,745,000 and interest and other income of $1,900,000. The percent of dollar volume that was net income was 5.2%. The company has two land development subsidiaries, one in Nevada and one in Idaho. Detached houses averaged 1738 sq. ft and sold for an average of $158,766. Apartments averaged 781 sq. ft. and rented for an average of $796 a month. The company estimated that 50% of buyers were families, 20% retirees, 15% young marrieds, 10% empty nesters and 5% singles. The company is active in Calif. (94%), Idaho (4%), and Nev. (2%).
161 **$102,224**	108	**261** **343** **units**	**Long Signature Homes** 13601 Office Pl. Woodbridge, Va. 22192 F. Gary Garczynski	In calendar 1989 this privately held company built and sold 187 single-family detached houses for $58,000,000 and 156 single-family attached houses for $20,000,000. Other income came from $22,812,800 in land sales, and $1,216,000 in contract building. Detached houses averaged 3100 sq. ft. in size and sold for an average price of $345,000. Attached houses averaged 2100 sq. ft. for $205,000 and condos averaged 1050 sq. ft. for $115,000. Buyers were 50% families, 27% young marrieds, 13% empty nesters and 10% singles. The company is active in Va. (90%) and Md. (10%).
162 **$102,078**	171	**234** **408** **units**	**Sterling Homes Corp.** 19752 MacArthur Blvd. Irvine, Calif. 92715-2422 Robert H. Lintz	In calendar 1989 this privately held company built and sold 408 single-family detached houses for $65,829,681. Other income came from land sales of $8,868,561, rental income and management fees of $48,632 income from financial institutions and subcontractors of $27,330,701. Detached houses average 2044 sq. ft. in size and sold for an average price of $176,331. The company is active exclusively in Calif.
163 **$101,972**	174	**151** **766** **units**	**Washington Homes Inc.** 956 Chandler Centre Waldorf, Md. 20602 Geaton A. DeCearis Jr.	This privately held company in fiscal year ended 7/31/89 built and sold 420 single-family detached houses for $62,680,071 and 346 single-family attached houses for $20,133,471. Remodeling and rehabilitation work added $19,099,363 to the company's revenues. Non-residential construction generated $59,528. Detached houses averaged 2100 sq. ft. and sold for an average price of $150,000. Attached houses averaged 1800 sq. ft. in size and sold for an average price of $85,000. Buyers were 70% families, 15% young marrieds, and 5% each singles, empty nesters and retirees. Company is active in Md. (80%), Va. (19%) and Pa. (1%).
164 **$101,600**	145	**239** **401** **units**	**Fairfield Homes Inc.** 12876 Harbor Dr. Woodbridge, Va. 22192 John V. Neill Jr.	In calendar 1989 this privately held company built and sold 363 single-family detached houses for $96,500,000 and 38 single-family attached houses for $5,100,000, which accounted for the company's entire revenue. Detached houses averaged 3000 sq. ft. and sold for an average price of $265,800. Attached houses averaged 1800 sq. ft. in size and sold for an average price of $134,200. Buyers were 35% families, 30% young marrieds, 25% singles, and 5% each empty nesters and retirees. Company is active in Va. (85%), Md. (10%) and Fla. (5%).
165 **$101,067**	153	**210** **497** **units**	**Kathryn G. Thompson Dev. Co.** 85 Argonaut Aliso Viejo, Calif. 92656 Kathryn G. Thompson	This privately held company in calendar 1989 built and sold 251 single-family detached houses for $67,980,000 and 246 single-family attached houses for $33,087,000 which accounted for all of the firm's revenues. Company also has a subsidiary, Gore Development Co., a general contracting firm also based in Aliso, Viejo, Calif. Detached houses averaged 1825 sq. ft. and sold for an average price of $270,836. Attached houses averaged 1100 sq. ft. and sold for an average price of $134,500. Buyers were 48% singles, 22% young marrieds, 16% families, 12% empty nesters and 2% retirees. Company is active exclusively in Calif.
166 **$100,493**	69	**346** **198** **units**	**Holiday Organization Inc.** 400 Post Ave. Westbury, N.Y. 11590 Gerald Monter	This privately held company in calendar 1989 built and sold 40 single-family detached houses for $22,805,000 and 158 single-family attached houses for $46,291,000. The company also built and sold 42 units of high-rise residential construction for $5,388,800. One remodeling and rehabilitation job generated $450,000. Other income came from land sales of $5,000,000 and rental income and management fees of $20,559,000. Detached houses averaged 3000 sq. ft. and sold for an average price of $500,000. Attached houses averaged 2000 sq. ft. in size and sold for an average price of $350,000. Apartments averaged 900 sq. ft. in size and had an average rent of $950 a month. Buyers were 40% empty nesters, 20% retirees, 15% young marrieds, 15% families and 5% singles. Company is active in N.Y.(85%) and Fla. (15%).
167 **$100,200**	120	**160** **724** **units**	**Levitt Corp.** 7777 Glades Rd. Boca Raton, Fla. 33434 Elliott M. Wiener	In calendar 1989 this privately held company built and sold 497 single-family detached houses for $67,800,000 and 51 single-family attached houses for $5,700,000. The company also built 176 apartments for it own investment valued at $16,700,000. Non-residential construction generated $3,000,000. Other income came from land sales of $300,000, rental income and management fees and other income of $3,000,000 and $3,700,000 from the sale of an ACLF facility. Detached houses averaged 1800 sq. ft. and sold for $136,400 on average. Attached units averaged 1500 sq. ft. and sold for $111,800. ACLF units averaged 700 sq. ft. and rented for about $1900 a month. Buyers were 75% families, 15% young marrieds and 5% each singles and retirees. Company is active in Puerto Rico (55%), Fla. (30%), Va. (10%) and N.J. (5%).
168 **$100,107**	274	**178** **620** **units**	**Woodview Development Co.** 200 E. Sandpointe Ave. Santa Ana, Calif. 92707 Thomas C. Siffermann	In calendar 1989 this privately held company built and sold 620 single-family detached houses for $96,100,000. Non-residential construction generated $2,400,000. Other income came from $612,000 in land sales and $995,000 in rental income and management fees. Detached units averaged 1700 sq. ft. and sold for an average price of $155,000. Buyers were 60% families, 20% young marrieds, and 10% each singles and empty nesters. Company is active exclusively in Calif.
169 **$98,891**	85	**218** **456** **units**	**FPA Corp.** 2507 Philmont Ave. Huntingdon Valley, Pa. 19006 Jeffrey P. Orleans	In fiscal year ended 6/30/89, this publicly held corporation traded on the American Stock Exchange built and sold 103 single-family detached houses for $22,334,000 and 326 single-family attached houses for $37,401,000. The company also manufactured and sold 27 mobile homes for $1,670,000. High-rise construction of 50 units generated another $7,803,000. Land sales added $6,376,000. Other income came from discontinued operation of resorts and country clubs, $12,974,000, proceeds from the sale of a partnership in which the company is the general partner of $4,286,000, interest income of $2,638,000 and other income of $3,409,000. The company has two subsidiaries, Orleans Corp. in Pa. and Orleans Florida Inc. both involved in building. Net income on total dollar volume was 9.7%. Detached houses averaged 2300 sq. ft. and sold for $216,800. Attached houses averaged 1700 sq. ft. with a $135,600 price tag, and condos averaged 1200 sq. ft. for $101,000. Buyers were 30% singles, 26% families, 15% each young marrieds and empty nesters and 14% retirees. Company is active in N.J. (40%), Pa. (37%) and Fla. (23%).

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Two new Giants—Michael Andrew Group and J.C.C. Development—typify West Coast's strength last year

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
170 **$96,783**	234	125 940 units	**Taylor Morley Simon Inc.** 1227 Fernridge Parkway St. Louis, Mo. 63141 Harry T. Morley	This privately held company in fiscal year ended 10/31/89 built and sold 255 single-family detached houses for $44,624,000 and 158 single-family attached houses for $12,901,000. The company also built and sold 357 apartments to investors for $20,200,000 and built 170 apartments for its own portfolio with a value of $20,000,000. Rental income and management fees added $1,058,000. Detached units averaged 2200 sq. ft. and sold for an average price of $175,000. Attached units averaged 1600 sq. ft. for $105,000. Condos averaged 1000 sq. ft. for $58,750. Apartments averaged 662 sq. ft. and rented for an average of $1100 a month. Buyers were 45% families, 30% empty nesters, 10% each singles and young marrieds and 5% retirees. Company is active exclusively in Mo.
171 **$96,592**	164	60 1834 units	**Morris General Building Co.** P.O. Box 3632 Chatsworth, Calif. 91313 G.L. Morris	This privately held company in calendar 1989 built and sold 7 single-family detached houses for $19,600,000. The company also built 1402 apartments for investors for $41,779,000 and 425 apartments for its own investment with a value of $12,751,000. Nine remodeling and rehabilitation jobs generated $8,357,000. Non-residential construction added $6,763,000. Other income came from land sales of $2,222,000 and rental income and management fees of $7,120,000. Detached houses averaged 12,000 sq. ft. and sold for an average price of $2,800,000. Condos averaged 1200 sq. ft. and sold for $180,000. Apartments average 800 sq. ft. and rent for an average of $900 a month. Buyers were 75% families, 10% each singles and young marrieds and 5% retirees. Active in Calif. (90%) and Wyo. (10%).
172 **$96,052**	162	150 767 units	**Continental Financial Corp.** P.O.Box 7679 Marietta, Ga. 30065 S. Kent Owings	This privately held company in calendar 1989 built and sold 767 single-family detached houses for $72,865,000. Non-residential work generated $8,500,000. Land sales added $16,687,000 to the company's revenues. Detached houses averaged 1800 sq. ft. in size and sold for an average price of $90,000. Buyers were 30% each young marrieds and families, 15% each singles and retirees and 10% empty nesters. Company is active in Ga. (50%), S.C. (21%), N.C. (16%) and Fla. (13%).
173 **$96,875**	169	376 141 units	**Frankel Enterprises** 1845 Walnut St. Philadelphia, Pa. 19103 Benjamin Frankel	This privately held company in calendar 1989 built and sold 52 single-family detached houses for $19,166,000 and 89 single-family attached houses for $22,159,000. Other income came from land sales of $17,969,000 and rental income and management fees of $15,863,000. The company's resort facilities generated an additional $21,718,000. Detached houses averaged 2700 sq. ft. in size and $368,000 in price. Attached units averaged 2100 sq. ft. in size and $249,000 in price. Buyers were 20% families, 2% each singles and young marrieds; 76% of buyers purchased houses as second homes. Company is active exclusively in Fla.
174 **$96,377**	129	103 1126 units	**Catalina Homes** 644 Ferguson Dr. Orlando, Fla. 32805 W.S. Orosz Jr.	In calendar 1989 this subsidiary of American Pioneer, Orlando, Fla., built and sold 1014 single-family detached houses for $86,541,914 and 112 single-family attached houses for $8,215,121. Land sales generated an additional $1,620,000. This company also has two building subsidiaries: Jonathon Homes, Indianapolis and Pro Contracting, Englewood, Fla. Detached houses averaged 1750 sq. ft. and sold for an average price of $90,000. Attached houses averaged 1500 sq. ft. and sold for $72,500. Buyers were 40% families, 25% young marrieds, 20% singles, 10% empty nesters and 5% retirees. Company is active in Fla. (66%) and Ind. (34%).
175 **$95,146**	130	274 307 units	**David Cutler Group** 512 Township Line Rd. Blue Bell, Pa. 19422 David Cutler	This privately held company in calendar 1989 built and sold 214 single-family detached houses for $58,850,000 and 52 attached houses for $9,100,000. The company also built 41 apartments for its own investment valued at $7,175,000. Other income came from land sales of $19,235,461 and rental income and management fees of $785,255. Detached houses averaged 3200 sq. ft. and sold for an average price of $295,000. Attached houses averaged 2200 sq. ft. in size and $175,000 in price. Apartments were 2200 sq. ft. and rented on average for $1450 a month. Buyers were 50% families, 20% empty nesters and 15% each singles and young marrieds. Company is active exclusively in Pa.
176 **$95,000**	—	309 254 units	**J.C.C. Development** 6520 Seacove Dr. Rancho Palos Verde, Calif. 92266 Jack Cameron	For calendar year 1989 this privately held company built and sold 112 single-family detached and 142 single-family attached houses for $91,900,000. Company also undertook 3 major rehabilitation projects for $3,100,000. Company sold 45% of homes to families with children, 20% to empty nesters, 15% to young couples without children, and 10% to singles and retirees each. Active in Calif. (98%) and Hawaii (2%). The company subcontracts 100% of construction work and has 51-100 employees.
177 **$91,907**	221	140 814 units	**United Development Mgmt.** 1400 S. Wolf Road Wheeling, Ill. 60090 Edward Havlik	This privately held company reported for the fiscal year (ended Sept. 30, 1989) building and selling 291 detached single-family homes for $37,000,000 and 186 attached single-family homes for $11,980,000. Additionally, the firm built 337 rental apartments for its own investment worth $23,310,000. Non-residential added $7,480,000, land sales chipped in with $6,960,000 and the firm also realized $2,167,000 in rentals and management fees. Single-family detached units averaged 2000 sq. ft. in size and $130,000 in price. Attached single-family were 1400 sq. ft. and $120,000 in price. The firm built condos that average 1050 sq. ft. in size and $71,000 in price. The average 950 sq. ft. rental unit brought in $700 per month. Half of the firm's activity was in Illinois with the rest split between Mich. (25%), Ariz. (20%) and Texas (5%). Most active market was to families with children at 47%. Other market segments included empty-nesters (22%), young marrieds without children (14%), retirees (12%), and singles (5%). United subcontracts more than 80% of its construction and employs more than 100 full-time persons.
178 **$91,500**	—	142 809 units	**Michael Andrew Group** 12526 High Bluff Drive San Diego, Calif. 92130 R.M. Scharringhausen	In calendar year 1989 this privately held company built and sold 381 single-family detached houses for $37,000,000, and 288 single-family attached houses for $45,000,000. Detached houses average 2300 sq. ft. and sell for an average price of $195,000. Attached houses average 1300 sq. ft. and sell for an average price of $159,000. The company also built 80 apartments for investors for $5,500,000. The company built 60 apartments for its own investment. These had a market value of $4,000,000. The apartments averaged 850 sq. ft. in size and rented for $595 a month. Active in California (90%) and Nevada (10%). The company has 51-100 employees.

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Prometheus Development builds 1014 apartments; Landstar builds and sells 712 detached homes

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
179 **$91,020**	—	**222** **438 units**	**J.E. Jones Const. Co.** 13100 Manchester Rd. St. Louis, Mo. 63131 Robert E. Jones	In calendar year 1989 this privately held company built and sold 410 single-family detached houses for $69,787,982, and 28 single-family attached houses for $2,070,297. Detached houses average 2500 sq. ft. and sell for an average price of $170,000. Attached houses average 1000 sq. ft. and sell for an average price of $66,000. Rents and management fees brought in $5,086,562. Land sales produced $4,479,295. Other sources of income (mainly labor sales) contributed $9,595,602. Active in Mo. (80%) and Fla. (20%). The company sold 73% to young families, 5% to singles, 11% to young couples without children, 7% to empty nesters, and 4% to retirees. The company subcontracts 81%-99% of construction work and has more than 100 employees.
180 **$90,549**	126	**166** **680 units**	**Summerhill Development** 777 California Ave. Palo Alto, Calif. 94304 Roger Swanson	In its latest fiscal year (ended March 31, 1990) this privately held company, a subsidiary of Marcus & Milichap Inc., built and sold 190 single-family attached houses for $36,827,207 and 490 apartments for its own investment, with a market value of $45,260,000. The apartments averaged 800 sq. ft. in size and rented for $700-$1000 a month. Rents and management fees brought in $8,461,530. Active in Calif. The company sold 30% to singles, 40% to young couples without children, 20% to young families, and 10% to empty nesters. The company subcontracts 81%-99% of construction work and has 21-50 employees.
181 **$90,000**	112	**112** **1014 units**	**Prometheus Development Co.** 2600 Campus Drive San Mateo, Calif. 94403 Sanford Diller	In its latest reporting year this privately held company built 1014 apartments for its own investment. These had a market value of $90,000,000. The apartments averaged 800 sq. ft. in size and rented for $800-$900 a month. Firm builds only in Calif. The company subcontracts 1%-20% of construction work and has more than 100 employees.
182 **$89,786**	136	**177** **622 units**	**Altman Development** 2300 Corporate Blvd, NW, Ste.123 Boca Raton, Fla. 33431 Joel L. Altman	In its latest reporting year this privately held company built 376 apartments for investors for $26,000,000. The company also built 246 apartments for its own investment. These had a market value of $12,300,000. The apartments averaged 1000 sq. ft. in size and rented for $785 a month. Rents and management fees brought in $50,486,187. Land sales produced $1,000,000. Active in Mich. (40%) and Fla. (60%). The company subcontracts 100% of construction work and employs more than 100 people.
183 **$89,150**	247	**139** **824 units**	**Di Loreto Const.** P.O. Box 70280 Reno, Nev. 89570 Perry M. Di Loreto	In calendar year 1989 this privately held company built and sold 525 single-family detached houses for $60,000,000 and 75 single-family attached houses for $6,150,000. Detached houses average 1800 sq. ft. and sell for an average price of $114,000. Attached houses average 1100 sq. ft. and sell for an average price of $82,000. The company also built 224 apartments for investors for $8,000,000. The apartments averaged 900 sq. ft. in size and rented for $600 a month. Non-res construction accounted for $8,000,000. Rents and management fees brought in $1,500,000. Land sales produced $5,000,000. Active in Nev. (80%) and Calif. (20%). The company sold 40% to young families, 30% to young couples without children, 15% to singles, 10% to retirees, and 5% to empty nesters. The company subcontracts 81%-99% of construction work and has more than 100 employees.
184 **$89,147**	181	**328** **219 units**	**Van Metre Cos.** 5252 Lyngate Ct. Burke, Va. 22015 A.G. Van Metre	in calendar year 1989 this privately held company built and sold 98 single-family detached houses for $32,743,000 and 117 single-family attached houses for $20,899,000. Detached houses average 2900 sq. ft. and sell for an average price of $333,500. Attached houses average 1758 sq. ft. and sell for an average price of $178,613. The company also built 4 apartments for its own investment. These had a market value of $782,000. The apartments averaged 850 sq. ft. in size and rented for $775 a month. The company completed 96 remodeling jobs for $2,058,000. Rents and management fees brought in $23,689,000. Land sales produced $7,634,000. Other sources of income contributed $ 2,340,000. Builds only in Va. The company sells primarily to young families (65%) and young couples without children (25%). The company subcontracts 81%-99% of construction work and employs more than 100 people.
185 **$88,525**	257	**260** **343 units**	**Sunland Communities** 525-B St. San Diego, Calif. 92101 Ure Kretowicz & Thomas Dobron	In calendar year 1989 this privately held company built and sold 343 single-family detached houses for $67,300,000. Detached houses average 2226 sq. ft. and sell in the $205,000-$220,000 price range. Non-res construction accounted for $8,200,000. Rents and management fees brought in $725,000. Land sales produced $12,300,000. Active in Calif. (90%) and Nev. (10%). The company sold 80% to young families, 5% to young couples without children, 10% to empty nesters, and 5% to retirees. The company subcontracts 100% of construction work and has more than 100 employees.
186 **$87,980**	189	**128** **907 units**	**Landstar Homes** 2533 Boggy Creek Rd. Kissimmee, Fla. 32743 Rodolfo Stern	This privately held company in calendar year 1989 built and sold 712 single-family detached houses for $65,628,000 and 195 single-family attached houses for $11,817,000. Detached houses average 1625 sq. ft. and sell for an average price of $92,000. Attached houses average 1188 sq. ft. and sell for an average price of $61,000. Rents and management fees brought in $755,000. Land sales produced $7,266,000. Other sources of income (revenues from water and sewer utilities) contributed $2,514,000. Builds only in Fla. The company sold 60% to young families, 15% to empty nesters, 15% to retirees, and 10% to singles. The company subcontracts 100% of construction work and employs more than 100 people.
187 **$86,573**	165	**192** **542 units**	**Union Valley Corp.** 2209 Route 9 Howell, N.J. 07731 Herbert Wishnick	In calendar year 1989 this publicly held company (AMEX) built and sold 188 single-family detached houses, 322 single-family attached houses, and 35 mobile homes for a total of $84,044,000. Rents and management fees brought in $2,529,000. Company builds both retirement and pre-retirement communities, non-age restricted housing, and commercial real estate in N.J., Del., and Pa.
188 **$85,800**	110	**242** **391 units**	**Kettler Brothers Inc.** 9426 Stewartown Road Montgomery Village, Md. 20879 Clarence E. Kettler	In its latest reporting year this privately held company built and sold 46 single-family detached houses for $10,779,672 and 345 single-family attached houses for $60,303,702. Detached houses average 2912 sq. ft. and sell for an average price of $307,049. Attached houses average 1854 sq. ft. and sell for an average price of $193,779. Non-res construction accounted for $1,804,094. Other sources of income (a resort/conference center) contributed $12,912,532. Active in Md. (67%), Pa. (27%), and Washington D.C. (6%). The company sold 39% to singles, 33% to young couples without children, 26% to young families, and 2% to retirees. The company subcontracts 81%-99% of construction work and employs more than 100 people.

THE 400

Wausau Homes achieves another growth year building 600 modular and 2410 panelized units

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
189 $85,500	—	**227** 425 units	**Zale Group** 100 Lexington Drive Buffalo Grove, Ill. 60089 Gregg Zale	In calendar year 1989 this privately held company built and sold 175 single-family detached houses for $42,500,000, and 250 single-family attached houses for $42,500,000. Detached houses average 2100 sq. ft.; attached houses average 1800 sq. ft. Land sales produced $500,000. Builds exclusively in Ill. The company sold 40% to young families, 30% to young couples without children, 20% to empty nesters, 10% to singles, and 10% to retirees. The company subcontracts 100% of construction work and employs more than 100 people.
190 $85,094	159	**195** 536 units	**Cambridge Homes Inc.** 800 S. Milwaukee Ave. Libertyville, Ill. 60048 Richard J. Brown	In its latest fiscal year (ended Nov. 30, 1989) this privately held company built and sold 287 single-family detached houses for $52,047,000 and 249 single-family attached houses for $31,032,000. Detached houses average 2300 sq. ft. and sell for an average price of $181,400. Attached houses average 1600 sq. ft. and sell for an average price of $124,600. Rents and management fees brought in $1,765,000. Land sales produced $250,000. Builds only in Ill. The company sold 60% to young families, 20% to young couples without children, 15% to singles, 4% to empty nesters, and 1% to retirees. The company subcontracts 81%-99% of construction work and has more than 100 employees.
191 $85,000	168	**311** 250 units	**Pennhill Co.** 3991 MacArthur Newport Beach, Calif. 92660 Thomas E. Tucker	In calendar year 1989 this privately held company built and sold 250 single-family detached houses for $65,000,000. Detached houses average 2200 sq. ft. and sell for an average price of $260,000. Land sales produced $20,000,000. Builds exclusively in Calif. The company sold 10% to singles, 10% to young couples without children, and 80% to young families. The company subcontracts 100% of construction work and has between 21-50 employees.
191 $85,000	226	**43** 2500 units	**Primark Corp.** 1200 S. 192nd St. Seattle, Wash. 98148 Hong S. Tan	In calendar year 1989 this privately held company built 2500 apartments for its own investment. These had a market value of $85,000,000. Condo units averaged 975 sq. ft. in size; rental apartments averaged 900 sq. ft. Builds exclusively in the state of Wash.
193 $83,800	190	**337** 210 units	**Amir Development Co.** 8730 Wilshire Blvd. Beverly Hills, Calif. 90211 Paul Amir	In calendar year 1989 this privately held company built 30 apartments for investors for $7,800,000. The company built 180 apartments for its own investment. These had a market value of $46,000,000. The apartments averaged 1100 sq. ft. in size. Remodeling projects accounted for $3,000,000, and non-res construction another $12,000,000. Rents and management fees brought in $15,000,000. Builds exclusively in Calif. The company subcontracts 100% of construction work and employs 11-20 people.
194 $83,030	143	**202** 524 units	**Wallick Construction Co.** P.O. Box 1023 Columbus, Ohio 43216 Jack L. Wallick	In calendar year 1989 this privately held company built and sold 121 single-family detached houses for $12,598,000 and 70 single-family attached houses for $8,690,000. Detached houses average 1400 sq. ft. and sell for an average price of $91,500. Attached houses average 1200 sq. ft. and sell for an average price of $80,000. The company also built 333 apartments for investors for $11,942,223. Condos averaged 1200 sq. ft. in size and sold for $100,000. Apartments ranged from 800-1000 sq. ft. Non-res construction (including a nursing home) accounted for $10,800,000. Rents and management fees brought in $39,000,000. Active in Ohio, Ind., Ky., and W. Va. The company subcontracts 100% of construction work and has more than 100 employees.
195 $82,000	212	**36** 2858 units	**Golden West Homes** 1308 Wakeham Santa Ana, Calif. 92705 Harry Karsten Jr.	In calendar year 1989 this privately held company built and sold 2772 mobile homes for $80,000,000 and 86 single-family modular units for $2,000,000. Active in Calif. (61%), Ore. (19%), Wash. (12%), Ariz. (4%), and Nev. (4%). The company sold 40% to retirees, 35% to empty nesters, 15% to young families, 5% to singles, and 5% to young couples without children. The company subcontracts none of its construction work and has more than 100 employees.
196 $81,839	133	**208** 498 units	**John Wieland Homes** P.O. Box 87363 Atlanta, Ga. 30337 John Wieland	In calendar year 1989 this privately held company built and sold 498 single-family detached houses for $81,839,000. Detached houses average 2700 sq. ft. and sell for an average price of $167,000. Builds exclusively in Ga. The company subcontracts 100% of construction work and has more than 100 employees.
197 $81,326	184	**159** 727 units	**Luckey Co.** P.O.Box 7428 Stockton, Calif. 95207 Thomas A. Luckey	In calendar year 1989 this privately held company built and sold 82 single-family detached houses for $19,000,000. Detached houses average 2290 sq. ft. and sell for an average price of $225,000. Company also built 645 apartments for investors for $41,000,000. The apartments averaged 840 sq. ft. in size and rented for $825 a month. Non-res construction accounted for $3,000,000. Rents and management fees brought in $3,137,000. Land sales produced $15,189,000. Active in Calif. (70%), Nev. (15%), and Oregon (15%). The company sold 65% to young couples without children, 15% to empty nesters, 10% to young families, 5% to singles, and 5% to retirees. The company subcontracts 100% of construction work and has between 21-50 employees.
198 $81,000	—	**351** 189 units	**Patt Organization** 422 Allegheny St. Hollidaysburgh, Pa. 16648 P. Jules Patt	In calendar year 1989 this privately held company built and sold 29 single-family detached houses for $3,900,000 and 160 single-family attached houses for $19,100,000. Detached houses average 1900 sq. ft. and sell for an average price of $134,000. Attached houses average 1400 sq. ft. and sell for an average price of $114,000. Non-res construction accounted for $33,000,000. Rents and management fees brought in $4,700,000. Land sales produced $300,000. Other sources (mainly construction services) contributed $20,000,000. Active in N.J. (70%) and Pa. (30%). The company sold 20% to singles, 20% to young couples without children, 20% to young families, 20% to empty nesters, and 20% to retirees. The company subcontracts 100% of construction work and has more than 100 employees.
199 $80,620	207	**31** 3010 units	**Wausau Homes Inc.** P.O.Box 8005 Wausau, Wis. 54402 Marvin C. Schuette	In its latest reporting year this privately held company built and sold 600 single-family modular units for $16,800,000, 1610 single-family panelized units for $48,300,000, and 800 multi-family panelized units for $15,520,000. Active in Wis. (38%), Ill. (34%), Minn. (11%), Iowa (4%), Ind. (4%), plus Ohio, Mich., Fla., Ga., and N.C.

THE 400

C-I/Mitchell & Best diversifies its mix with revenues from home construction, remodeling and non-res

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
200 $80,550 est.	19	**71** 1611 units est.	**Fogelman Properties** 5400 Poplar Memphis, Tenn. 38119 Avron B. Fogelman	*Professional Builder* estimates that this privately held firm in 1989 built and sold 1611 apartments for estimated revenues shown.
201 $80,000	—	**252** 364 units	**Blackfield Hawaii Corp.** 1221 Kapiolani Blvd. Honolulu, Hawaii 96814 James Hoover	In calendar year 1989 this subsidiary of Wilson Neill Ltd., Dunedin, New Zealand, built and sold 200 single-family detached houses for $36,000,000 and 164 single-family attached houses for $21,000,000. Detached houses average 1400 sq. ft. and sell for an average price of $180,000. Attached houses average 900 sq. ft. and sell for an average price of $128,000. Land sales produced $23,000,000. Builds exclusively in Hawaii. The company sold 35% to young couples without children, 35% to young families, 15% to singles, 10% to empty nesters, and 5% to retirees. The company subcontracts 100% of construction work and has between 21-50 employees.
202 $79,562	158	**201** 525 units	**Engle Group Inc.** 123 NW 13th St. Boca Raton, Fla. 33432 Alec Engelstein	In calendar year 1989 this privately held company built and sold 413 single-family detached houses for $53,178,000 and 112 single-family attached houses for $9,520,000. Detached houses average 2100 sq. ft. and sell for an average price of $128,000. Attached houses average 1400 sq. ft. and sell for an average price of $85,000. Land sales produced $16,863,000. Firm builds exclusively in Florida. The company sold 25% to young couples without children, 50% to young families, and 25% to empty nesters. The firm subcontracts 100% of its construction work and employs more than 100 people.
203 $79,013	264	**176** 624 units	**American West Development** 2700 E. Sunset Rd. Las Vegas, Nev. 89120 Lawrence D. Canarelli	In calendar year 1989 this privately held company built and sold 624 single-family detached houses for $74,561,000. Detached houses average 2011 sq. ft. and sell for an average price of $119,488. Land sales produced $4,452,000. Firm builds exclusively in Nev. The company, which was founded in 1984, sold 44% to young families, 22% to retirees, 11% to young couples without children, 14% to empty nesters, and 6% to singles. The firm subcontracts 100% of its construction work and employs 51-100 people.
204 $78,759	213	**193** 538 units	**Town & Country Homes** 1603 W. 16th St. Oak Brook, Ill. 60521 William G. Ryan	In its most recent reporting year this privately held company built and sold 182 single-family detached houses for $26,770,000 and 356 single-family attached houses for $41,986,517. Detached houses average 1845 sq. ft. and sell for an average price of $147,088. Attached houses average 1355 sq. ft. and sell for an average price of $117,940. Non-res construction accounted for $3,036,000. Rents and management fees brought in $866,000. Land sales produced $6,100,000. Firm builds exclusively in Ill. The firm subcontracts 100% of its construction work and employs 51-100 people.
205 $78,130	181	**21** 5002 units	**Cavalier Homes Inc.** 600 M Bank Bldg. Wichita Falls, Texas 76307 Barry Donnell	In calendar year 1989 this publicly held company (AMEX) built and sold 5002 mobile homes for $78,129,877. Subsidiary operations of the company that are involved in shelter manufacturing include Cavalier Homes of Alabama, Addison, Ala.; Brigadier Homes of North Carolina, Nashville, N.C.; and Buccaneer Homes of Alabama, Hamilton, Ala.
206 $77,300	122	**234** 408 units	**RGC-RecreActions Group** 220 Newport Ctr. Dr. Newport Beach, Calif. 92660 E. James Murar	In its latest reporting year this privately held company built and sold 108 single-family detached houses for $30,200,000 and 300 single-family attached houses for $47,100,000. Detached houses average 1800 sq. ft. and sell for an average price of $280,000. Attached houses average 1150 sq. ft. and sell for an average price of $142,000. Active in N.J. (60%) and Calif. (40%). The company sold 35% to young families, 30% to young couples without children, 18% to singles, 12% to empty nesters and 5% to retirees. The firm subcontracts 100% of its construction work and employs 51-100 people.
207 $76,082	155	**377** 133 units	**C-I/Mitchell & Best Co.** 1686 E. Gude Dr. Rockville, Md. 20850 Robert L. Mitchell	In calendar year 1989 this privately held company built and sold 61 single-family detached houses for $38,743,000 and 69 single-family attached houses for $30,005,000. Detached houses average 3,495 sq. ft. and sell for an average price of $635,100. Attached houses average 2900 sq. ft. and sell for an average price of $492,000. The company also built 3 townhouse apartment units for its own investment. These had a market value of $1,500,000. The apartments averaged 1300 sq. ft. in size and rented for $985 a month. The firm completed a number of remodeling jobs for $478,000. Non-res construction accounted for $1,396,000. Rents and management fees brought in $3,576,000. Other sources and interest contributed $384,000. Firm builds exclusively in Md. The company sold 62% to empty nesters, 18% to young families, 15% to young couples without children, 2% to singles, and 3% to retirees. The firm subcontracts 100% of its construction work and employs more than 100 people.
208 $75,860	170	**167** 679 units	**Mitchell Co.** P.O.Box 160306 Mobile, Ala. 36616 John B. Saint	In calendar year 1989 this subsidiary of Altus Bank, Mobile, Ala., built and sold 275 single-family detached houses for $19,351,000 and 4 single-family attached houses for $228,000. Detached houses average 1700 sq. ft. and sell for an average price of $71,700. Company also built 400 apartments for investors for $13,029,000. The firm completed a remodeling job for $629,000. Non-res construction accounted for nearly $54,000,000. Rents and management fees brought in $36,667,000. Land sales produced $1,483,000. Other sources of income contributed $4,410,000. Active in Tenn. (44%), Fla. (22%), La. (19%), Ala. (9%), Miss. (5%), and Ga. (1%). The firm subcontracts 61%-80% of its construction work and employs more than 100 people.
209 $75,442	—	**256** 353 units	**Republic Development Co.** 180 N. Riverview Anaheim, Calif. 92808 John R. Hartung	In calendar year 1989 this privately held company built and sold 353 single-family detached houses for $64,442,858. Detached houses average 1980 sq. ft. and sell for an average price of $162,000. Land sales produced $11,000,000. Firm builds exclusively in Calif. The company sold 45% to young families, 25% to young couples without children, 10% to singles, 10% to empty nesters, and 10% to retirees. The firm subcontracts 100% of its construction work and employs 11-20 people.

ANNUAL REPORT OF HOUSING'S GIANTS ®

THE 400

Robson Communities, a new Giant from Arizona, places 218th this year

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
210 **$75,366**	236	**24** 3753 units	**Homes of Merit Inc.** P.O.Box 1606 Bartow, Fla. 33830 Charles E. Weeder	In calendar year 1989 this privately held company built and sold 3753 mobile homes for $75,365,667.
211 **$74,860**	259	**110** 1026 units	**Bozzuto & Associates** 6401 Golden Triangle Dr. Greenbelt, Md. 20770 Thomas S. Bozzuto	In its latest fiscal year (ended March 1990) this privately held company built 1026 apartments for its own investment. These had a market value of $74,000,000. The apartments averaged 800 sq. ft. in size and rented for $800 a month. Subsidiaries includes Bozzuto Development and Bozzuto Construction (both of Greenbelt), as well as the recently-acquired Davis Landscaping Co. of Upper Marlboro, Md. Rents and management fees brought in $860,000. Active in Md. (76%) and Va. (24%). The firm subcontracts 81%-99% of its construction work and employs 51-100 people
212 **$74,000**	266	**205** 509 units	**INCO Homes** P.O. Box 970 Upland, Calif. 91785-0970 Ira Norris	In calendar year 1989 this privately held company built and sold 509 single-family detached houses for $60,000,000. Detached houses average 1900 sq. ft. and sell for an average price of $120,000. Land sales produced $14,000,000. Firm builds exclusively in Calif. The company sold 50% to young families, 20% to young couples without children, 15% to retirees, 10% to singles, and 5% to empty nesters. The firm subcontracts 100% of its construction work and employs 51-100 people.
212 **$74,000**	88	**214** 464 units	**Oceanic Properties Inc.** P.O. Box 2780 Honolulu, Hawaii 96803 Thomas C. Leppert	In calendar year 1989, this subsidiary of Castle & Cooke, Los Angeles, built and sold 298 single-family detached houses for $55,000,000 and 166 single-family attached houses for $19,000,000. The company sold 40% to young families, 20% to singles, 20% to young couples without children, 10% to empty nesters, and 10% to retirees. The firm subcontracts 81%-99% of its construction work and employs more than 100 people.
214 **$72,983**	172	**245** 384 units	**Pasquinelli Construction Co.** P.O. Box 1639 Homewood, Ill. 60490 Bruno A. Pasquinelli	In calendar year 1989 this privately held company built and sold 149 single-family detached houses for $28,773,000 and 235 single-family attached houses for $21,515,000. Detached houses average 2150 sq. ft. and sell for an average price of $193,107. Attached houses average 1190 sq. ft. and sell for an average price of $91,553. Major subsidiaries include Portrait Homes of Chicago and N.C., Alca carpentry, Schick-Gary Partnership and Buffalo Grove Partnership, land developers and commercial contractors. Pasquinelli completed 4 remodeling jobs for $180,000. Rents and management fees brought in $327,000. Land sales produced $16,032,000. Other sources of income (mainly carpentry services) accounted for $6,156,000. Active in Ill. (86%) and N.C. (14%). The company sold 34% to young couples without children, 22% to young families, 21% to singles, 18% to empty nesters, and 5% to retirees. The firm subcontracts 61%-80% of its construction work and employs more than 100 people.
215 **$72,654**	310	**154** 750 units	**Amurcon Corp. of Virginia** 1001 E. Main St. Richmond, Va. 23219 Robert W. Schaberg	In calendar year 1989 this privately held company built and sold 84 single-family attached houses for $10,700,000. Attached houses average 1150 sq. ft. and sell for an average price of $125,000. The company also built 666 apartments for investors for $41,600,000. The apartments averaged 825 sq. ft. in size and rented for $550 a month. Rents and management fees brought in $20,354,000. Builds exclusively in Va. The company sold 60% to young couples without children, 30% to singles, and 10% to young families. The firm subcontracts 100% of its construction work and employs 21-50 people.
216 **$72,638**	230	**109** 1040 units	**Nanticoke Homes Inc.** P.O. Box F Greenwood, Del. 19950 John Mervine	In its latest fiscal year (ended Sept. 30, 1989) this privately held company built and sold 971 single-family modular units for $64,549,878 and 69 multi family modular units for $2,682,499. Detached modular units average 1400 sq. ft. Non-res construction (offices, recreational buildings, and medical buildings) accounted for $2,406,000. Management fees brought in $3,000,000. Active in Del., Md., Va., N.J., and Pa. The company sold 60% to young families, 10% to singles, 10% to young couples without children, 10% to empty nesters, and 10% to retirees.
217 **$72,160**	93	**364** 166 units	**Gregory Group** 1070 Sixth Ave, Ste.200 Belmont, Calif. 94002 Jeffrey A. Slavin	In calendar year 1989 this privately held company built and sold 166 single-family detached houses for $71,660,600. Detached houses average 2200 sq. ft. Non-res construction (office buildings) accounted for $500,000. Firm builds exclusively in Calif. The firm subcontracts 81%-99% of its construction work and employs 51-100 people.
218 **$71,624**	—	**257** 349 units	**Robson Communities** 25632 S. Howard Dr. Sun Lakes, Ariz. 85248 E. J. Robson	In calendar year 1989 this privately held company built and sold 349 single-family detached houses for $56,000,000. Detached houses average 2000 sq. ft. and sell for an average price of $150,000. Rents and management fees brought in $790,000. Other sources of income (utilities, retail and commercial real estate) contributed $14,834,000. Firm builds exclusively in Ariz., although expansion plans include activities in Calif., Nev. and N.M. The company sold 20% to empty nesters and 80% to retirees. The firm subcontracts 81%-99% of its construction work and employs more than 100 people.
219 **$70,634**	182	**365** 166 units	**Cayman Development** 18012 Cowan Street Irvine, Calif. 92714 Dave Eadie, Raymond Rutter	In calendar year 1989 this privately held company built and sold 21 single-family detached houses for $16,964,000 and 145 single-family attached houses for $53,670,000. Detached houses average 3300 sq. ft. and sell for an average price of $807,800. Attached houses average 2300 sq. ft. and sell for an average price of $370,000. Firm builds exclusively in Calif. The company sold 44% to young families, 38% to empty nesters, 6% to singles, 7% to young couples without children and 5% to retirees. The firm subcontracts 81%-99% of its construction work and employs 21-5 people.
220 **$70,220**	235	**185** 574 units	**Hylton Group** 13901 Jefferson Davis Woodbridge, Va. 22191 Cecil D. Hylton	In calendar year 1989 this privately held company built and sold 229 single-family detached houses for $30,750,000 and 183 single-family attached houses for $18,950,000. The company also built 162 apartments for its own investment. These had a market value of $9,720,000. Rents and management fees brought in $6,800,000. Land sales produced $4,000,000. Firm builds exclusively in Virginia. The company sold 58% to young families, 28% to young couples without children, and 14% to singles. The firm subcontracts 81%-99% of its construction work and employ 51-100 people.

THE 400

Fuqua Homes—with 2764 units—is a major mobile home producer in the South and West

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
221 $70,100	194	292 284 units	**McBride & Son Enterprises** 11 McBride Corp. Cntr. Drive St. Louis, Mo. 63005 Richard R. Gastorf	In calendar year 1989 this privately held company built and sold 240 single-family detached houses for $39,000,000 and 14 single-family attached houses for $1,000,000. Detached houses average 2200 sq. ft. and sell for an average price of $135,000. Attached houses average 1200 sq. ft. and sell for an average price of $75,000. Company also built 30 apartments for investors for $2,000,000. The firm completed 1500 remodeling jobs for $3,000,000. Non-res construction accounted for $25,100,000. The firm is active in Mo. (85%) and Ill. (15%). The company sold 50% to young families, 20% to young couples without children, 15% to retirees, 10% to singles, and 5% to empty nesters. The firm subcontracts 41%-60% of its construction work and employs more than 100 people.
222 $70,077	215	237 406 units	**Interstate General Co. L.P.** 222 Smallwood Village Cntr. St. Charles, Md. 20602 James J. Wilson	Master limited partnership traded on the American and Pacific Stock Exchanges built and sold for calendar 1989, 102 single-family detached homes for $17,769,597, 200 single-family attached units for $21,082,144, and 104 rental units for its own investment at $8,400,000. Also reported $15,676,000 in land sales, $5,825,000 in rental income and management fees and 1,324,000 in interest. Single-family detached units averaged 2000 sq. ft. and $133,000. Attached units averaged 1500 sq. ft. and $105,000. Operations were concentrated 70% in Md. and the remainder in Va. Families with children comprise 35% of the market, empty-nesters $33% and singles 32%. Non-residential jobs included shopping centers and recreational buildings. Subcontracts more than 80% of construction and employs more than 100 persons full time.
223 $70,000	198	122 968 units	**Zaremba Development Co.** 14600 Detroit Rd. Lakewood, Ohio 44107 Alan F. Scott	In calendar year 1989 this privately held company built 968 apartments for its own investment. These had a market value of $55,000,000. The apartments averaged 900 sq. ft. in size and rented for $650 a month. Rents and management fees brought in $15,000,000. Active in Pa. (65%) and Ohio (35%). The company sold 45% to singles, 40% to young couples without children, 5% to young families, 5% to empty nesters, and 5% to retirees. The firm subcontracts 100% of its construction work and employs 21-50 people.
223 $70,000	277	243 390 units	**Hillside Residential Inc.** 209 W. Ave. J. Lancaster, Calif. 93534 Alain B. Rogier	In its latest fiscal year (ended Aug. 31, 1989) this privately held company built and sold 390 single-family detached houses for $68,500,000. Detached houses average 1800 sq. ft. and sell for an average price of $155,000. Land sales produced $1,500,000. Active in Calif. (90%) and Nev. (10%). The firm subcontracts 100% of its construction work and employs 21-50 people.
225 $69,300	218	354 184 units	**Signature Properties** 6685 Owens Dr. Pleasanton, Calif. 94566 James C. Ghielmetti	In calendar year 1989 this privately held company built and sold 159 single-family detached houses for $61,200,000 and 25 single-family attached houses for $5,100,000. Detached houses average 2300 sq. ft. and sell for an average price of $380,000. Attached houses average 1500 sq. ft. and sell for an average price of $205,000. Rents and management fees brought in $3,300,000. Builds exclusively in Calif. The company sold 90% to young families, 5% to singles and 5% to empty nesters. The firm subcontracts 100% of its construction work and employs 51-100 people.
226 $68,481	214	39 2764 units	**Fuqua Homes Inc.** 7100 S. Cooper Arlington, Texas 76017 William C. Noble	In its latest fiscal year (ended June 30, 1989) this privately held company built 2764 mobile homes for $68,481,000. Active in Ore. (25%), Calif. (21%), Fla. (17%), Ariz. (14%), Mo. (13%), and Texas (10%). The company sold 30% to young families, 30% to empty nesters, 30% to retirees, 5% to singles and 5% to young couples without children.
227 $67,886	197	382 111 units	**Joe Keim Builders Inc.** 618 Frazier Ct. Wheaton, Ill. 60187 Joseph A. Keim	In calendar year 1989 this privately held company built and sold 111 single-family detached houses for $35,026,000. Detached houses average 3350 sq. ft. and sell for an average price of $315,500. Land sales produced $32,859,000. Builds exclusively in Ill. The company sold 84% to young families, 10% to young couples without children, 1% to singles, 2% to empty nesters and 3% to retirees. The firm subcontracts 81%-99% of its construction work and employ 11-20 people.
228 $67,505	304	219 454 units	**Kopf Construction Corp.** 32730 Walker Rd. Avon Lake, Ohio 44012 H.R. Kopf	This privately held firm reported building and selling 97 single-family detached units at $26,675,000, 71 attached single-family units for $9,230,000 and 286 rental apartments for its own investment at $21,000,000. Rounding out the figures were $2,500,000 in non-residential construction, $800,000 in land sales, $3,500,000 in rental income and management fees and $3,800,000 in development fees. Average single-family detached unit sold for $275,000 and average attached unit for $130,000. Virtually all activity was in the firm's home state. Less than 20% of work was subcontracted and the firm has more than 100 full-time employees.
229 $67,225	209	281 297 units	**Davidson Communities** 12520 High Bluff Dr. San Diego, Calif. 92130 William A. Davidson	This privately held company reported for calendar year 1989 that it built and sold 217 single-family detached units for $36,040,000 and 80 single-family attached units for $31,185,000. The detached homes averaged 1701 sq. ft. and sold for $166,100; the attached units averaged 1559 sq. ft. and sold for $389,800. All construction activity was in Calif., and more than 80% was subcontracted. The firm employs between 50 and 100 persons full time.
230 $66,633	176	398 13 units	**Planned Residential Comm.** 60 Monmouth Park Hwy. West Long Branch, N.J. 07764 Robert M. Kaye	Privately held company reported building three single-family detached homes for a total of $1,375,000 and 10 attached units for $1,430,000. It also undertook a $1,717,000 remodeling job and did $4,228,000 in non-residential construction—mainly warehouses. Rounding out the total was $57,883,000 in rental income and management fees. Sold 33% of its product to empty-nesters, 28% to young couples with no children, 21% to singles and 18% to families with children. Operates in Ohio (54% of volume), Del. (31%), Mass. (11%) and N.J. (4%). All construction is subcontracted and the firm employs more than 100 persons full time.
231 $65,900	180	58 1882 units	**North American Housing Corp.** P.O. Box 145 Point of Rocks, Md. 21777 R. Carl Benna	Entire dollar volume for this privately held company in calendar year 1989 was in production of 1882 factory-built single-family modular homes, both attached and detached. Detached units averaged 1650 sq. ft. in size and $36,800. Attached units average 1200 sq. ft. and $27,900. Sells units in nine different states, including Va. (21%), Md. (22%), N.J. (13%), Maine (20%), N.H. (5%), N.C. (5%), Conn. (4%), Pa. (4%) and S.C. (3%). Firm employs more than 100 people full-time.

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Palm Coast Construction changes its corporate name to ITT Community Homes

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
232 **$65,500**	—	**174** **638 units**	**Western National Properties** 630 The City Drive Orange, Calif. 92668 Michael K. Hayde	The privately held company in calendar 1989 built 638 apartments for investors for a total of $59,000,000. Also generated $6,500,000 in rental income and management fees. Average unit was sized at 785 sq. ft. and rented for $750 per month. All activity, which was subcontracted, was generated in Calif. Principal markets included singles (50%), young couples with no children (30%), families with children (10%) and empty-nesters (10%). The firm employs more than 100 persons full-time.
233 **$65,415**	246	**225** **429 units**	**Borror Corporation** 5501 Frantz Rd. Dublin, Ohio 43067-0766 Douglas G. Borror	The privately held company built and sold in calendar year 1989, 407 single-family detached homes for a total of $40,465,000 and 22 attached single-family units at $2,727,000. Also reported $3,670,000 in land sales, $5,610,000 in rental and management fees, and $12,943,000 in other miscellaneous income. The detached units averaged 1800 sq. ft. in size and $105,900 in price. Attached units averaged 1900 sq. ft. and $123,700. With all activity in its home state, Borror reports 38% of sales to families with children, 34% to young couples without children, 26% to singles and 1% each to empty-nesters and retirees. All work is subcontracted and the firm has more than 100 full-time employees.
234 **$65,203**	173	**170** **652 units**	**Covington Development Group** 2451 E. Orangethorpe Fullerton, Calif. 92631 Loran D. Covington	The publicly held corporation has three operating subsidiaries: Covington Homes, Southern California; Covington Homes, Southwest; and Covington Homes, Northern California. The firm reports that it built and sold in calendar 1989, 588 detached single-family homes for $47,059,000 and 64 units in fourplexes which it built for investors for $1,345,000. Also reported $12,510,000 in land sales, $2,100,000 in rental income and management fees and $2,189,000 from various joint ventures. The detached housing averaged 2459 sq. ft. in size at $325,000. The fourplex units contained an average of 3960 sq. ft. at an average price of $334,000. Families with children accounted for 60% of sales with the rest equally divided between singles, young couples with no children, empty-nesters and retirees. Principal markets are Calif. (80% of total) and Nev. With more than 100 full-time employees, the company subcontracts more than 80% of its construction.
235 **$64,652**	211	**221** **440 units**	**Cloverleaf Properties Inc.** 8355 Rockville Rd. Indianapolis, Ind. 46234 Roy L. Prock	Specializing in apartments, this privately held company in calendar year 1989 built 240 rental units for investors at a value of $6,594,000 and another 200 units for its own investment at $6,900,000. Two remodeling jobs added $607,842 and warehouse construction, another $400,000. Also reports $2,821,569 in land sales, $25,668,506 in rental and management fees, and $21,680,097 in gross income and management fees from nursing homes. Operating only in Ind., the firm employs more than 100 persons full-time and subcontracts more than 80% of its construction.
236 **$64,598**	245	**183** **588 units**	**Lockwood Group** 17 W. Lockwood Ave. St. Louis, Mo. 63119 Joseph A. Shepard	This privately held company reported building and selling 588 apartments for investors in 1989 at a total cost of $24,793,000. Construction of a car care mall added $1,735,000. Rental income and management fees totaled $36,866,000 and interest income $1,204,000. The apartments built last year averaged 700 sq. ft. in size and rented for an average of $400 per month. Georgia was the scene of 77% of the company's activity, with 11% in Mo., 3% in Ark., and 2% in Ky. All construction is subcontracted and the firm employs more than 100 full-time persons.
237 **$64,530**	193	**216** **459 units**	**ITT Community Homes** 1 Hargrove Grade Palm Coast, Fla. 32037 Robert DeVore	This publicly held firm, formerly listed as Palm Coast Construction Corp., is a subsidiary of ITT Community Development Corp. It reports building and selling in calendar year 1989, 421 single-family detached homes for a total of $44,500,000 and 38 single-family attached units valued at $3,040,000, all in Fla. Non-residential construction in the form of retail stores, offices, recreational buildings and educational structures accounted for $16,600,000. Property management fees added $390,000. Average detached unit was 1750 sq. ft. in size at $105,000. Attached un[illegible]averaged 1330 sq. ft. and sold for $80,000. Empty nesters accounted for 75% of sales with [illegible]ainder to families with children. Firm subcontracts more than 80% of construction and employs between 50 and 100 persons full time.
238 **$64,150**	315	**385** **101 units**	**Michael T. Rose Associates** P.O. Box 40 Laurel, Md. 20707 Michaal T. Rose	Privately held company reported in calendar year 1989 building and selling 10 single-family detached units for $12,500,000 and 91 attached units at $16,650,000. Office building construction added $10,000,000 and land sales $25,000,000. Detached homes averaged 2400 sq. ft. a piece and attached units 2000 sq. ft. Young couples with no children accounted for 30% of sales, empty nesters and double income (not married) households for 20% each. Families with children (15%), singles (10%) and retirees (5%) complete the mix. The firm subcontracts all construction work and has between 50 and 100 full-times employees.
239 **$63,000**	104	**175** **630 units**	**Gulfstream Land & Dev. Corp.** 861 Douglas Avenue Altamonte Springs, Fla. 32714 Roy T. Dye	A subsidiary of Good/Gulfstream Holding Corp., the firm reported building and selling 630 single-family detached units. Also active in land sales. Active soley in the Sunshine State, the firm employs between 50 and 100 persons full time.
240 **$62,987**	305	**169** **673 units**	**Roberts Properties Inc.** P.O. Box 28744 Atlanta, Ga. 30328 Charles S. Roberts	Privately held company built and sold in calendar year 1989, 117 single-family detached homes valued at $17,550,000. It also built 556 rental apartments for investors at a total price tag of $36,790,000. A single remodeling job brought an additional $105,000, and non-residential construction accounted for $53,000. Firm also reported $1,153,000 in land sales, $3,636,000 in rental income and management fees and $3,700,000 in other fees and interest income. Average single-family home built by the firm was 2399 sq. ft. in size and sold for $150,000. Apartments built for investors averaged 1200 sq. ft. for $650 per month rentals. Families with children accounted for 60% of the firm's market, with 35% young couples with no children, and 5% singles. The firm operates only in Ga. and reports that it subcontracts more than 80% of its construction. The firm employs between 20 and 50 people full time.
241 **$62,819**	356	**194** **537 units**	**Community Construction Inc.** 531 California Ave. Bakersfield, Calif. 93304 James R. Trigueiro	Privately held company reported building and selling 297 single-family detached homes with a total value of $45,267,519 in calendar 1989. Also built 240 apartments for investors at $12,000,000. Construction of mini-markets added $832,836. Land sales totaled $2,391,000, rental and management fees $1,296,941, and commissions and miscellaneous income $1,031,039. Single-family units averaged 1800 sq. ft. and sold for $161,801 on average. Average apartment was 850 sq. ft. and brought in $595 in monthly rent. With 64% of its market in Nev. and the remainder in Calif., the firm reports 49% of customers to be families with children. Singles and empty-nesters accounted for 21% each and young couples with no children 9%. More than 80% of construction is subcontracted and the firm reports between 20 and 50 full-time employees.

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
242 **$62,462**	240	**196** **529 units**	**Century Homes** P.O. Box 8110 San Bernardino, Calif. 92412 John Pavelak	Privately held company reported in calendar year 1989 building and selling 529 single-family detached homes for $60,712,000. Also added $1,750,000 in office buildings. All work done in Calif. Average home contained 1500 sq. ft. of space. Target markets include 45% families with children, 25% young couples with no children and 10% each singles, empty-nesters and retirees. All construction is subcontracted and firm employs more than 100 persons full time.
243 **$61,800**	238	**59** **1848 units**	**Wick Building Systems** 403 Walter Rd. Mazomanie, Wis. 53560 John Wick	This privately held company manufactured and sold 1673 mobile homes for $38,000,000 and 175 panelized singe-family home packages for $8,300,000 in calendar 1989. Non-residential work added another $15,500,000. The firm sells units in Ill., Wis., Ind., Iowa and Mich. Non-residential activity includes warehouses, farm buildings and recreational structures.
244 **$61,142**	178	**190** **549 units**	**Orange Blossom Hills Inc.** 1200 Avenida Central Lady Lake, Fla. 32159 Harold S. Schwartz	Privately held company reported in calendar 1989 building and selling 549 single-family detached homes at $30,628,898. Completed five remodeling jobs for $267,000. Non-residential (shopping centers, warehouses, retail stores, office buildings, restaurants and recreational buildings) added $9,535,000. Also had $9,280,430 in land sales, $533,347 in rental income and management fees and $10,895,969 in other related businesses. Single-family product averaged 1356 sq. ft. in size. All sold to retirees in Fla. Firm subcontracts less than 20% of its construction and employs more than 100 persons full time.
245 **$61,000**	191	**251** **367 units**	**Calprop Corp.** 5456 McConnell Ave. Los Angeles, Calif. 90066 William Rattazzi	Publicly held company (AMEX) reported in 1989 building and selling 277 single-family detached homes at $23,200,000 and 90 attached units at $26,900,000. Also had $10,900,000 in land sales. Detached product averaged 2050 sq. ft. and a price of $255,000. Attached units averaged 2200 sq. ft. and a price of $448,000. All activity in Calif. with 45% to families with children, 25% to young couples with no children, 15% to empty-nesters, 10% to singles, and 5% to retirees. Subcontracts all construction and employs more than 100 persons full time.
246 **$60,936**	347	**369** **50 units**	**Bush Development Corp.** 5532 Raby Rd. Norfolk, Va. 23502 J.J. Digges	Privately held company built and sold in calender 1989 50 single-family attached units at $7,410,000. High-rise apartments added $23,846,000. Remodeling of a 509-unit apartment project brought $11,900,000, and the construction of restaurants and recreational buildings another $860,000. Rental income and management fees accounted for $16,920,000. Activity was concentrated 50% in D.C., 30% in Va., and 20% in Md. Average size of single-family attached units was 1200 sq. ft. with a price tag of $148,000. Condos averaged 845 sq. ft. and $129,000. Rental units contained 850 sq. ft. and brought an average of $850 monthly. Company subcontracts more than 80% of its construction and employs more than 100 persons full time.
247 **$60,231**	223	**305** **259 units**	**Realen Homes** 1235 Westlake Dr. Berwyn, Pa. 19312 W. Joseph Duckworth	Privately held company built and sold 144 detached single-family homes for $30,521,370 and 115 attached single-family homes for $14,247,904 in calendar 1989. Also reports $8,251,039 in land sales and $7,210,249 in rental income and management fees. Sales broke out 45% to families with children, 25% to young couples with no children, 20% to singles, 8% to empty-nesters and 2% to retirees. All business is done in Pa. Company subcontracts all of its construction work and employs more than 100 persons full time.
248 **$60,160**	—	**332** **214 units**	**Weston Development** 10889 Wilshire Blvd. Los Angeles, Calif. 90024 John A. Ashkar	Privately held company reports for calendar 1989 that it built and sold 96 detached single-family homes for $29,769,000 and 66 attached single-family units for $13,860,000. Also built 52 apartments for its own investment at $4,056,000. Shopping center construction added $12,500,000. Firm conducted all business in Calif. Average single-family detached home contained 2100 sq. ft. and sold for $300,000. Average attached unit was 1450 sq. ft. and $200,000. Rental apartments averaged 800 sq. ft. and rented for $805. Families with children accounted for 40% of markets. Remainder broke out at 25% empty-nesters, 20% young couples with no children, 10% singles and 5% retirees. All construction was subcontracted and firm employs between 20 and 50 persons full time.
249 **$60,000**	203	**42** **2583 units**	**Blazer Building** 10101 Harwin, Suite 300 Houston, Texas 77036 Chris Richardson	Privately held company reported in calendar 1989 that it built 2583 apartments for investors for a total of $55,000,000. Also added $5,000,000 in non-residential construction. Average unit size was 780 sq. ft. Markets include Fla. (30%), Ohio (20%), Md. (15%), S.C. (15%), N.C. (10%), Ga. (9%), and Texas (1%). Firm subcontracts more than 80% of its construction work and employs between 50 and 100 persons full time.
249 **$60,000**	144	**279** **300 units**	**Homestead Development Co.** 50 Oak Ct. Danville, Calif. 94526 Fred W. Hull	All activity for this privately held company in calendar 1989 came in the form of 300 single-family detached homes averaging 1850 sq. ft. in size. The firm builds only in Calif. and subcontracts all construction work. The company employs between 20 and 50 people full time.
251 **$59,863**	244	**271** **310 units**	**Zaring National Corp.** 11300 Cornell Park Dr. Cincinnati, Ohio 45242 Allen G. Zaring	For calendar year 1989, this privately held company built and sold 29 single-family attached homes for $4,417,687 and 281 single-family detached homes for $55,445,120. The single-family attached homes averaged 1700 sq. ft. and sold for an average price of $160,000, and the detached units averaged 2800 sq. ft. with an average price of $225,000. The company builds in Ohio and northern Ky. (66.5%), Tenn. (22.6%) and Fla. (10.9%).
252 **$59,679**	208	**147** **780 units**	**Rayco Inc. (Ellison Homes)** P.O. Box 5250 San Antonio, Texas 78201 John H. Willome	This privately held company built and sold 780 single-family detached homes for a sales volume of $59,678,659. The homes averaged 2292 sq. ft. and sold for an average price of $76,626. Builds only in Texas. The company subcontracts 100% of all construction work and employs more than 100 workers.

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Trojan Properties is developing Morningside, a Jack Nicklaus golf course community

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
253 **$59,625 est.**	**294**	**313** **250 units est.**	**Gigliotti Corporation** **One Summit Square** **Langehorne, Pa. 19047** **Chris Gigliotti Jr.**	*Professional Builder* estimates that this privately held firm in 1989 built and sold 50 single-family attached units for a sales volume of $7,525,000 and 200 single-family detached units for $52,100,000.
254 **$59,442**	**228**	**209** **497 units**	**Orleans Construction Corp.** **2507 Philmont Ave.** **Huntingdon Valley, Pa. 19006** **Jeffrey P. Orleans**	For calendar year 1989, this privately held company built and sold 470 single-family attached homes for sales of $52,141,000 and 27 single-family detached homes for sales of $6,267,000. Rental income and management fees brought in $215,000, and construction management fees and interest added another $819,000. The single-family attached homes averaged 1500 sq. ft. with an average price of $156,000. Single-family detached units averaged 2200 sq. ft. and sold for an average price of $232,000. Apartment condos averaged 1000 sq. ft. and $95,000. The company builds in N.J. (97%) and Pa. (3%) and has more than 100 employees.
255 **$59,433**	**—**	**305** **259 units**	**Costain Homes Inc.** **620 Newport Center Dr.** **Newport Beach, Calif. 92660** **Dale Dowers**	For calendar year 1989, this publicly held corporation built and sold 259 single-family detached homes for a sales volume of $47,364,900. Land sales accumulated an additional $12,068,000. The homes averaged 2050 sq. ft. and sold for an average of $182,900. The company builds only in Calif. and has 51-100 employees.
256 **$59,150**	**296**	**394** **39 units**	**Trojan Properties Inc.** **P.O. Box 962** **Rancho Mirage, Calif. 92270** **Edwin C. Johnsen**	For calendar year 1989, this privately held company built and sold 39 single-family detached homes for a sales volume of $58,000,000. Rental income and management fees accumulated an additional $1,150,000. The single-family homes averaged 4300 sq. ft. and sold for an average price of $1,750,000. The company is developing Morningside, a Rancho Mirage, Calif., community around a Jack Nicklaus golf course. The company builds only in Calif. and has 21-50 employees.
257 **$59,000**	**239**	**346** **198 units**	**Braemar Homes** **30495 Canwood St.** **Agoura Hills, Calif. 91301** **Sidney H. Dinow**	For calendar year 1989, this privately held company built and sold 72 single-family detached homes for a sales volume of $35,500,000. Firm also completed 126 apartments built for own investment for a market value of $15,000,000. Land sales accounted for an additional $5,450,000, and rental income and management fees totaled $3,050,000. The single-family detached homes averaged 3000 sq. ft. with an average price of $490,000. Rental apartments averaged 952 sq. ft. at $1,060/mo. Company builds only in Calif., subcontracts 100% of construction work and employs 21-50 workers.
258 **$58,995**	**250**	**300** **266 units**	**Sun City Center Corp.** **P.O. Box 5696** **Sun City Center, Fla. 33570** **Kim Frasell**	For calendar year 1989, this privately held company built and sold 147 single-family attached homes for a sales volume of $12,796,000 and 119 single-family detached units for $15,664,000. In addition, land sales generated $10,088,000, rental income and management fees brought in $45,000. Lodging, food service, maintenance and recreation combined also generated another $20,402,000. The single-family attached units averaged 1406 sq. ft. sold for an average of $87,000. The detached averaged 1714 sq. ft. and $132,000. The company builds only in Fla., subcontracts 100% of construction work and has more than 100 employees.
259 **$58,580**	**—**	**268** **317 units**	**Cameo Homes** **P.O. Box 2990** **Newport Beach, Calif. 92660** **J.C. Gianulias**	This company built and sold 173 single-family detached units for a sales volume of $51,000,000. Also built for investors were 144 low-rise apartments with a sales volume of $6,480,000. Land sales generated an additional $100,000 and rental income and management fees generated $1,000,000. The single-family detached units averaged 2200 sq. ft. and sold for an average price of $380,000 while apartments averaged 900 sq. ft. and sold for an average of $40,000. Company builds only in Calif. and subcontracts 100% of work.
260 **$57,342**	**205**	**343** **203 units**	**William L. Berry Co.** **5701 Democracy Blvd.** **Bethesda, Md. 20817** **William L. Berry**	For calendar year 1989, this privately held company built and sold 81 single-family detached units for a sales volume of $31,162,503 and 122 single-family attached units for a sales volume of $23,441,601. In addition, land sales generated $2,047,365 while development fees and interest combined, generated $691,023. The single-family detached units averaged 3200 sq. ft. and sold on the average for $416,000. The attached units averaged 2400 sq. ft. with an average sale of $221,000. The company builds in Va. (75%) and Md. (25%) and has 51-100 employees.
261 **$56,969**	**—**	**278** **301 units**	**Quaker Group Builders** **593 Bethlehem Pike** **Montgomeryville, Pa. 18936** **Streeper Kerr III**	This company built and sold 301 single-family detached homes for a total sales volume of $48,066,520. Non-residential construction added another $2,302,053. In addition, land sales generated $1,728,000 and rental income and management fees generated $4,872,911. Single-family detached homes averaged 1900 sq. ft. and sold for an average of $160,000. Company subcontracts 100% of its work and has 21-50 employees. Built only in Pa. for 1989, but moves into 1990 by opening a community of 182 single-family detached homes in Gloucester County, N.J.
262 **$56,800**	**—**	**319** **234 units**	**Manning Co.** **2031 Orchard Drive** **Santa Ana Heights, Calif. 92707** **James C. Manning**	For calendar year 1989, this privately held company built and sold 28 single-family attached units for a sales volume of $3,700,000 and 206 single-family detached units for a sales volume of $52,600,000. Non-residential construction totaled $4,200,000. Rental income and management fees also generated an additional $500,000. Single-family attached units averaged 1239 sq. ft. with an average sales price of $130,000 and the detached units averaged 2090 sq. ft. with an average sales price of $236,000. Company builds only in Calif. and subcontracts 100% of work.
263 **$56,672**	**258**	**265** **328 units**	**Pembroke Enterprises Inc.** **4425 Corporation Lane** **Virginia Beach, Va. 23462** **Frederick J. Napolitano**	For calendar year 1989, this privately held company built and sold 108 single-family attached units for a sales volume of $8,200,427 and 154 single-family detached units for a sales volume of $17,692,890. For their own investment the company also built 66 apartments with a sales volume of $2,650,000. Land sales generated $4,899,772, rental income and management fees generated $19,130,813 and commercial shops, commission and related ventures generated $4,098,066. Single-family attached homes averaged 1500 sq. ft. with a price of $81,942; detached units averaged 2100 sq. ft. with a price of $123,105; apartment condos averaged 1200 sq. ft. with a price of $70,000; and the rental apartments averaged 875 sq. ft. with an average monthly rent of $500. Builds only in Va.

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Blitman builds in New Jersey, New York and Florida; Crosswinds Communities is active in Michigan

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
264 **$56,556**	267	**96** **1234 units**	**Epoch Properties Inc.** 359 Carolina Ave. Winter Park, Fla. 32789 James H. Pugh Jr.	For fiscal year ending 6/30/89, this privately held company built 1234 apartments for investors for a sales volume of $55,530,000. Investments in partnerships, interest, and other miscellaneous income generated $1,025,912. The apartments averaged 875 sq. ft. with an average rental price of $550. Company subcontracted 100% of construction work and has 21-50 employees. Builds only in Fla.
265 **$56,137**	—	**320** **229 units**	**All Valley Financial** 18801 Ventura Boulevard Tarzana, Calif. 91356 Howard W. Speer	For calender year 1989, this subsidiary of Valley Federal Savings & Loan built and sold 118 single-family attached units for a sales volume of $31,519,524 and 111 single-family detached units for a sales volume of $18,307,812. The sales volume for non-residential construction was $6,310,000. Single-family attached homes averaged 1743 sq. ft. and detached units averaged 1893 sq. ft. Building only in Calif., the firm subcontracted 100% of construction work. Company has 11-20 employees.
266 **$56,000**	220	**323** **225 units**	**Blitman Building Corp.** 475 Fifth Ave. New York, N.Y. 10017 Howard N. Blitman	For calendar year 1989, this privately held company built and sold 150 single-family attached units for a sales volume of $30,000,000. In addition, 75 apartments were built for investors with a sales volume of $10,000,000. Firm completed 2 remodeling jobs for a sales volume of $6,000,000 and constructed 75 high-rise residential units for $10,000,000. The company builds in N.J. (40%), Fla. (40%) and N.Y. (20%). For 1989, 81%-99% of construction work was subcontracted. Firm has 11-20 employees.
267 **$55,800**	343	**311** **250 units**	**Crosswinds Communities** 7380 Meadowridge Circle Bloomfield, Mich. 48033 Bernard Glieberman	For calendar year 1989, this privately held company built and sold 250 single-family attached units for a sales volume of $50,000,000. Land sales generated $4,400,000 and rental income and management fees totaled $1,400,000. Attached units averaged 1350 sq. ft. Company builds only in Mich., subcontracts 81%-99% of construction work and employs 51-100 people.
268 **$55,414 est.**	232	**172** **642 units est.**	**Estes Home Building** P.O.Box 17360 Tucson, Ariz. 85731-7360 William Estes Jr.	*Professional Builder* estimates this privately held company in calendar year 1989, built and sold 642 single-family detached houses which sold for an estimated $55,414,000.
269 **$55,000**	335	**301** **264 units**	**Pacifica Corp.** 200 N. Westlake Blvd. Westlake Village, Calif. 91362 Dana Arnold	This privately held company built and sold 264 single-family detached units for a sales volume of $54,000,000. An additional $1,000,000 was generated in rental income and management fees. Detached units averaged 2200 sq. ft. with an average price of $205,000. Building only in Calif., the firm subcontracts 100% of construction work and employs 21-50 people.
269 **$55,000**	—	**299** **270 units**	**JMC** 1830 Vernon St., Ste. 8 Roseville, Calif. 95678 John Mourier III	For calendar year 1989, this privately held company built and sold 270 single-family detached units for a sales volume of $39,000,000. The sales volume for non-residential construction was $1,000,000. Land sales totaled $15,000,000. Detached units averaged 1950 sq. ft. and sold for an average price of $145,000. Building only in Calif., the company employs 51-100 workers and sub-contracts 81%-99% of construction work.
271 **$54,800**	192	**361** **172 units**	**Graham Cos.** 6843 Main St. Miami Lakes, Fla. 33014 W. E. Graham	For fiscal year ending May, 1990, this privately held company built and sold 130 single-family attached units for a sales volume of $13,000,000 and 42 single-family detached homes for a sales volume of $6,500,000. Non-residential construction accounted for $14,000,000, land sales totaled $1,100,000, and rental income and management fees generated $20,200,000. Single-family attached homes averaged 1000 sq. ft. and sold for an average price of $85,000, and detached homes averaged 2000 sq. ft. for $180,000. Company subcontracts 100% of construction work and employs more than 100 workers. Building only in Fla.
272 **$54,252**	253	**22** **4303 units**	**Patriot Homes Inc.** 57420 County Rd. 3 Elkhart, Ind. 46517 Sam Weidner	For fiscal year ending 9/30/89, this privately held company manufactured 1169 mobile homes for a sales volume of $15,581,000 and 3134 floors of single-family modular units for a sales volume of $38,671,000. The company is building in Ind. (71%) and Ala. (29%) and employs more than 100 workers.
273 **$54,093**	271	**344** **202 units**	**Kettler Forlines Inc.** 19110 Montgomery Village Ave. Gaithersburg, Md. 20760 Clifford E. Forlines	For calendar year 1989, this privately held company built and sold 100 single-family detached homes for a sales volume of $30,014,000 and 102 single-family attached homes for a total sales volume of $21,694,000. Land sales generated $2,300,000 and rental income and management fees totaled an additional $85,000. The single-family detached homes sold for an average price of $300,000 and the attached units for $212,000. Company builds in Md. (60%), Va. (20%) and Pa. (20%). More than 100 workers are employed by the company, and 81%-99% of construction work is subcontracted.
274 **$53,251**	285	**143** **798 units**	**Hughes-Patell Homes** P.O. Box 6181 Linglestown, Pa. 17112 Eugene Bastian	For calendar year 1989, this privately held company built and sold 798 single-family detached homes for a sales volume of $53,251,000. The units averaged 1500 sq. ft. and sold for an average price of $66,000. The company builds in Pa. (80%), Md. (13%), W.Va. (6%) and Ohio (1%). More than 100 workers are employed by the company and 100% of construction work is subcontracted.
275 **$53,179**	177	**230** **414 units**	**First Financial Group** 16830 Ventura Blvd. Encino, Calif. 91436 Jack Shine	For calendar year 1989, this privately held company built and sold 129 single-family detached homes for a sales volume of $24,072,820 and 285 single-family attached units for a sales volume of $29,105,720. The detached units averaged 1713 sq. ft. and sold for an average price of $199,930. The attached units averaged 1113 sq. ft. and sold for $103,949. The company builds only in Calif., subcontracts 81%-99% of construction work and employs 51-100 workers.

THE 400

New entrant, Martin Selko Co., caters to high-end luxury market in Beverly Hills, Calif.

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
276 **$53,025**	286	**340** 205 units	**Ryder Homes** P.O. Box 4008 Walnut Creek, Calif. 94596 Ned K. Ryder	In calendar year 1989 this privately held company built and sold 205 single-family detached units for $31,548,000. Land sales generated $14,044,000 in revenues. Rental income and management fees brought $7,433,000. Detached product averaged 2000 sq. ft. of space for $155,000. Sales were to families with children (50%), young married, no children (20%), empty-nesters (15%), singles (10%) and retirees (5%). Firm employs between 21 and 50 people full time.
277 **$52,733**	195	**349** 194 units	**Stuard-Signature Homes Inc.** 23701 Birtcher Dr. El Toro, Calif. 92630 Norman Stuard	This privately held company in calendar year 1989 built and sold 65 single-family detached units for $28,965,300 and 129 single-family attached units for $23,767,527. Detached product averaged 3105 sq. ft. of space for $432,560. Attached product averaged 1695 sq. ft. of space for $245,806. Firm is active solely in Calif. It has between 21 and 50 full-time employees.
278 **$52,500 est.**	—	**189** 550 units est.	**Homestead Group Association** 11854 LaGrange Ave. Los Angeles, Calif. 90025 Haskel Iny	*Professional Builder* estimates that in calendar year 1989 this privately held company built for investors 550 apartments for the estimated revenues shown.
279 **$52,371**	306	**289** 285 units	**Friedman Homes Inc.** 11155 Jersey Rancho Cucamonga, Calif. 91730-5148 Paul Friedman	This privately held company in calendar year 1989 built and sold 285 single-family detached units for $52,371,000. The detached product averaged 2300 sq. ft. of space for $185,000. Firm is active solely in Calif. It employs between 21 and 50 people full time.
280 **$52,124**	292	**287** 289 units	**Zicka Homes Inc.** 11939 Montgomery Road Cincinnati, Ohio 45249 Michael Zicka	This privately held company in calendar year 1989 built and sold 127 single-family detached units for $34,925,000. It also built 162 apartments with a market value of $5,100,000 for its own investment. Non-res construction of shopping centers totaled $2,400,000. Land sales generated $9,699,000 in revenues. Detached product averaged 2900 sq. ft. of space for $275,000. Sales were to families with children (66%), young married, no children (21%), singles (9%) and empty-nesters (4%). Firm is active solely in Ohio. It has between 21 and 50 full-time employees.
281 **$52,000**	298	**228** 421 units	**Milburn Investments Inc.** 11911 Burnet Road Austin, Texas 78766 Bill Milburn	In calendar year 1989 this privately held company built and sold 421 single-family detached units for $35,000,000. Miscellaneous income brought $17,000,000 in revenues. Detached product averaged 1800 sq. ft. of space for $85,000. Sales were to families with children (50%), young married, no children (30%), empty-nesters (10%) and retirees (10%). Firm is active solely in Texas. It has between 51 and 100 full-time employees.
282 **$51,899**	263	**226** 426 units	**Acacia Construction Inc.** 1021 W. Bastanchury Rd. Fullerton, Calif. 92633 Richard G. Snyder	This privately held company in calendar year 1989 built and sold 106 single-family detached units for $16,211,000. It also built 320 apartments with a market value of $22,000,000 for its own investment. Land sales generated $9,807,000 in revenues. Rental income and management fees brought an additional $1,559,000. Miscellaneous income amounted to $2,322,000. Detached product averaged 1908 sq. ft. of space for $152,900. Sales were to families with children (65%), young married, no children (15%), singles (10%), empty-nesters (8%) and retirees (2%). Firm is active solely in Calif. It has more than 100 full-time employees.
283 **$51,500**	314	**386** 100 units	**Pinn Brothers Construction** 1475 Saratoga Ave. San Jose, Calif. 95129 Alan R. Pinn	This privately held company in fiscal year ended 1/31/90 built and sold 100 single-family detached units for $42,500,000. Land sales generated $8,000,000 in revenues. Rental income and management fees brought an additional $1,000,000. Detached product averaged 2500 sq. ft. of space for $425,000. Sales were entirely to families with children. Firm is active solely in Calif. It has between 21 and 50 full-time employees.
284 **$51,325**	280	**138** 830 units	**Lindal Cedar Homes Inc.** 4300 S. 104th Pl. Seattle, Wash. 98178 Robert W. Lindal	This publicly held corporation in calendar year 1989 manufactured 830 precut home packages for a sales volume of $43,790,000. Remodeling and rehabilitation jobs brought $7,535,000 in revenues. Detached product averaged 2200 sq. ft. of space. Sales were to empty-nesters (35%), families with children (30%), retirees (16%), singles (13%) and young married, no children (6%). Firm is active in Calif., N.Y., Wash., Hawaii and Ore. It has more than 100 full-time employees. Firm has international operations in Japan and Canada.
285 **$51,239**	270	**289** 285 units	**Red Seal Development Corp.** 425 Huehl Rd. Northbrook, Ill. 60062 David Hoffman	This privately held company in calendar year 1989 built and sold 21 single-family detached units for $4,200,000 and 60 single-family attached units for $15,000,000. It also built 204 apartments with a market value of $14,300,000 for its own investment. Remodeling and rehabilitation jobs brought $1,300,000. Non-res construction of shopping centers generated $12,000,000 in revenues. Land sales accounted for $2,575,000, while rental income and management fees accounted for $1,864,000. Attached product averaged 2300 sq. ft. of space for $250,000. Rental apartments averaged 900 sq. ft. of space for $675. Firm is active solely in Ill. It has between 21 and 50 full-time employees. Subsidiaries include Red Seal Management Co. and Red Seal Construction Co.
286 **$50,700**	—	**399** 10 units	**Martin Selko Co.** 110 N. Doheny Dr. Beverly Hills, Calif. 90211 Martin P. Selko	In fiscal year ended 2/28/90 this privately held company built and sold 10 single-family detached units for $50,700,000. The firm is active solely in Calif. It has between 21 and 50 full-time employees.
287 **$50,552**	291	**269** 316 units	**Newmark Home Corp.** 10435 Greenbough Stafford, Texas 77477 John E. Harris	In calendar year 1989 this privately held company built and sold 316 single-family detached units for a sales volume of $50,552,055. Detached product averaged 3154 sq. ft. of space for $156,962. Sales were to families with children (60%), empty-nesters (15%), young married, no children (10%), singles (10%) and retirees (5%). Firm is active solely in Texas. It has between 21 and 50 full-time employees. Subsidiary is Fedrick, Harris Estate Homes.

THE 400

Liberty manufactures 3526 mobile home units; Signature concentrates on selling detached homes

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
288 **$50,500**	243	**190** 549 units	**S&A Custom Built Homes Inc.** 501 Rolling Drive State College, Pa. 16801 Robert Poole	This privately held company in calendar year 1989 built and sold 512 single-family detached units for $41,500,000 and 37 single-family attached units for $2,500,000. Remodeling and rehabilitation jobs brought $300,000 in revenues. Non-res construction of office buildings accounted for $2,200,000. Land sales totaled $1,800,000, while miscellaneous income was $2,200,000. Detached product averaged 1507 sq. ft. of space for $81,000. Attached product averaged 1600 sq. ft. of space for $100,000. Sales were to families with children (45%), young married, no children (33%), singles (10%), empty-nesters (7%) and retirees (5%). Firm is active in Pa., Md., and W. Va. It has more than 100 full-time employees.
289 **$50,380**	—	**232** 410 units	**Signature Homes** 801 South Rancho Drive Las Vegas, Nev. 89106 Richard Plaster	This privately held company in calendar year 1989 built and sold 410 single-family detached units for $49,480,475. Rental income and management fees totaled $900,000. Detached product averaged 1800 sq. ft. of snace for $119,500. Firm is active solely in Nev. It has between 51 and 100 full-time employees.
290 **$50,147**	330	**356** 180 units	**Whitecliff Co. Inc.** 859 San Mateo Dr. San Mateo, Calif. 94401 Paul C. Petersen	This privately held company in calendar year 1989 built and sold 35 single-family detached units for $26,569,553 and 145 single-family attached units for $23,347,525. Land sales totaled $230,000. Firm is active solely in Calif.
291 **$50,000 est.**	—	**155** 746 units est.	**Miles Homes Inc.** 4700 Nathan Lane Plymouth, Minn. 55442 Peter DeGeorge	*Professional Builder* estimates that this privately held company in fiscal year ended 9/30/89 built and sold 746 single-family detached units for $50,000,000. Detached product averaged 1500 sq. ft. of space. Firm is active in 28 states. It has more than 100 full-time employees.
292 **$49,974**	279	**314** 247 units	**Ciotti Cos.** 111 Summit Drive Exton, Pa. 19341 Sebastian R. Ciotti	This privately held company in calendar year 1989 built and sold 162 single-family detached units for $23,202,400 and 85 single-family attached units for $9,798,200. Non-res construction of warehouses, medical and office buildings totaled $11,592,000. Land sales generated $725,000 in revenues, while rental income and management fees generated $4,277,900. Miscellaneous income was $379,400. Detached product averaged 1950 sq. ft. of space for $143,200. Attached product averaged 1600 sq. ft. of space for $115,275. Firm is active in Pa., N.J. and Del. It has between 51 and 100 full-time employees.
293 **$49,703**	222	**25** 3526 units	**Liberty Homes Inc.** 1101 Eisenhower Dr., N. Goshen, Ind. 46526 Edward J. Hussey	This publicly held corporation in calendar year 1989 manufactured 3526 mobile homes for a sales volume of $49,703,000. Firm has more than 100 full-time employees.
294 **$49,205**	318	**247** 379 units	**James K. Schuler & Associates** 1001 Bishop St. P.T. Honolulu, Hawaii 96813 James K. Schuler	This privately held company in calendar year ended 1989 built and sold 199 single-family detached units for $28,865,000 and 180 single-family attached units for $19,080,000. Land sales generated $160,000. Rental income and management fees totaled $1,100,000. Firm employs between 11 and 20 people full time. Subsidiaries include JPS Hawaii Inc. and Port Quendall Development.
295 **$49,000**	252	**240** 401 units	**Century American** P.O. Box 3500 Laguna Hills, Calif. 92705 Roger C. Hobbs	This privately held company in calendar year 1989 built and sold 201 single-family detached units for $33,000,000. It also built 200 apartments with a market value of $13,000,000 for its own investment. Non-res construction of office buildings brought $1,000,000. Rental income and management fees totaled $2,000,000. Detached product averaged 1700 sq. ft. of space for $160,000. Rental apartments averaged 800 sq. ft. of space for $750 per month. Firm is active solely in Calif. It has between 21 and 50 full-time employees.
296 **$48,490**	—	**301** 264 units	**Bennett & Compton Inc.** P.O. Box 1597 Lodi, Calif. 95241-1597 Dennis G. Bennett	This privately held company in fiscal year ended 1989 built and sold 244 single-family detached units for $31,328,013 and 20 single-family attached units for $2,177,550. Land sales generated $14,498,742. Rental income and management fees totaled $68,388, while miscellaneous income accounted for $417,034. Detached product averaged 2000 sq. ft. of space for $128,394. Attached product averaged 1200 sq. ft. of space for $108,878. Firm is active solely in Calif. It has between 21 and 50 full-time employees.
297 **$48,300**	277	**232** 410 units	**Sexton Companies** 9001 N. Meridian St. Indianapolis, Ind. 46260 Joseph F. Sexton	This privately held company in calendar year 1989 built 410 apartments with a market value of $15,000,000 for its own investment. Remodeling and rehabilitation work totaled $6,500,000. Rental income and management fees brought $26,800,000. Rental apartments averaged 745 sq. ft. of space for $480 per month. Firm is active in Ind. (60%) and Ohio (40%). It has more than 100 full-time employees. Subsidiaries include J&M Construction and J&N Management.
298 **$48,200**	298	**393** 42 units	**Weinstock Construction Corp.** 4400 Coldwater Canyon Studio City, Calif. 91604 Julian Weinstock	This privately held company in calendar year 1989 built and sold 42 single-family detached units for $26,200,000. Remodeling and rehabilitation jobs brought $16,000,000. Rental income and management fees totaled $6,000,000. Rental apartments averaged 500 sq. ft. of space for $490. Sales were to families with children (50%), young married, no children (25%) and retirees (25%). Firm is active solely in Calif. It has between 21 and 50 full-time employees.

THE 400

Shawntana and California Community Builders make their debut among the Giants

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
299 **$47,981**	251	**381** **116 units**	**M.J. Peterson Corp.** 501 John James Audubon Pkwy. Amherst, N.Y. 14228 V. Peterson Jr.	This privately held company in calendar year 1989 built and sold 96 single-family detached units for $12,792,000 and 20 single-family attached units for $4,758,000. Remodeling and rehabilitation jobs accounted for $7,000,000. Land sales brought $684,000, while rental income and management fees totaled $19,067,000. Miscellaneous income accounted for $3,660,000. Detached product averaged 2115 sq. ft. of space for $133,000. Attached product averaged 2548 sq. ft. of space for $238,000. Firm is active solely in N.Y. It has more than 100 full-time employees.
300 **$47,750**	—	**350** **194 units**	**Shawntana** 3501 Jamboree Newport Beach, Calif. 92660 James B. Fleig	This privately held company in calendar year 1989 built and sold 78 single-family detached units for $20,000,000 and 104 single-family attached units for $27,000,000. It also built 12 apartments with a market value of $750,000 for its own investment. Detached product averaged 1900 sq. ft. of space for $300,000. Attached product averaged 1400 sq. ft. of space for $250,000. Rental apartments averaged 800 sq. ft. of space for $500 per month. Sales were to singles (30%), young married, no children (25%), families with children (25%) and empty-nesters (20%). Firm is active solely in Calif. It has between 21 and 50 full-time employees.
301 **$46,814**	370	**134** **843 units**	**DeLuxe Homes of Pa.** 499 W. 3rd St. Berwick, Pa. 18603 Donald E. Meske	This privately held company built and sold 34 single-family detached homes for a sales volume of $4,800,000 and 80 single-family attached homes for $9,800,000. Company also manufactured 257 single-family modular units and 472 multi-family modular units for a combined sales volume of $32,213,823. Company builds in N.Y. (60%), Conn./R.I. (12%), Pa. (11%), N.J. (9%) and seven other states (8%). Company employs more than 100 workers.
302 **$46,000**	248	**67** **1708 units**	**Ritz-Craft Corp. of Pa. Inc.** P.O. Box 70 Mifflinburg, Pa. 17844 Paul R. John	For calendar year 1989, this privately held company manufactured 364 mobile homes for a sales volume of $10,000,000 and 1344 single-family modular units for a sales volume of $36,000,000. The single-family units averaged 1300 sq. ft. Company builds in N.Y. (45%), Pa. (30%), New England (10%), N.J. (5%), Va. (5%), Del. (5%) and Maine (5%). More that 100 workers are employed by the company and 100% of construction work is subcontracted.
303 **$45,792**	295	**387** **87 units**	**Rocky Gorge Communities** 7900 Westpark Drive McLean, Va. 22102 Christopher S. Dorment	For calendar year 1989, this privately held company built and sold 73 single-family detached homes for a sales volume of $43,899,008 and 14 single-family attached homes for a sales volume of $1,892,587. Single-family detached homes average 3200 sq. ft. with an average selling price of $601,000. Single-family attached homes averaged 1150 sq. ft. and $135,000. Building in Md. (95%) and Va. (5%), the company subcontracts 81%-99% of construction work and employs 51-100 people. During 1989, the company successfully completed the award-winning project Gates at Avenel in Potomac, Md.
304 **$45,786**	318	**373** **156 units**	**Wooldridge Organization** 1500 Green Hill Rd. West Chester, Pa. 19380 Robert E. Wooldridge	For calendar year 1989, this privately held company built and sold 14 single-family detached units at a sales volume of $5,626,000 and 142 single-family attached units for a sales volume of $28,114,505. One remodeling job brought $5,500,000, rental income and management fees generated an additional $1,963,220, and additional ventures added another $4,582,211. The detached units averaged 3100 sq. ft. with an average price of $450,000. Single-family attached averaged 1900 sq. ft. and $200,000. The company builds in Pa. (84%) and Calif. (16%), subcontracts 61%-80% of construction work and has more than 100 employees.
305 **$45,325**	307	**137** **834 units**	**Holly Corp.** 101 E. 26th St. Tacoma, Wash. 98421 Daniel M. Kelley	This privately held company built and sold 16 single-family detached homes for a sales volume of $1,111,900. The company also built 818 apartments for its own investment with a market value of $33,963,600. Land sales brought $6,587,250, rental income and management fees totaled $3,111,984, and subsidiary real estate and brokerage companies generated $550,428. The single-family detached units averaged 1600 sq. ft. at an average price of $83,000. Apartment condos averaged 1000 sq. ft. at a price of $125,000. Rental apartments averaged 950 sq. ft. with a monthly rent of $750. Company builds only in Wash., subcontracts 81%-99% of construction and employs 21-50 people.
306 **$45,100**	—	**363** **168 units**	**California Community Builders** 233 Wilshire Blvd. Santa Monica, Calif. 90401 W.A. Fruehling	This privately held company built and sold 168 single-family detached homes for a sales volume of $45,100,000. The company builds only in Calif. and employs 21-50 people.
307 **$45,000**	276	**40** **2675 units**	**Guerdon Industries** 10200 Sepuvada Blvd Mission Hills, Calif. 91345 Fred Huckvale	For calendar year 1989, this privately held company manufactured 2600 mobile homes for a sales volume of $42,000,000 and 75 single-family modular units for a sales volume of $2,000,000. The company employs more than 100 workers.
308 **$44,911**	167	**27** **3495 units**	**National Enterprises Inc.** Earl Ave. & Wallace Lafayette, Ind. 47903 Garry Culverson	For calendar year 1989, this publicly held corporation, traded on the NYSE, manufactured 2750 single-family panelized units for a sales volume of $34,488,000 and 745 panelized units for a sales volume of $4,953,000. Carpentry subcontracting generated an additional $5,469,000. The company employs more than 100 workers.
309 **$44,700**	281	**357** **178 units**	**Roy E. Daly & Co.** 9055 Haven Ave. Rancho Cucamonga, Calif. 91730 Roy E. Daly Jr.	For calendar year 1989, this privately held company built and sold 178 single-family detached units for a sales volume of $36,200,000. Land sales generated an additional $2,000,000 and rental income and management fees brought $6,500,000. Detached units averaged 2400 sq. ft. at an average price of $205,000. The company builds in Calif. (68%), Kan. (15%), Nev. (10%) and Colo. (7%).

THE 400

Leader is one of Tennessee's largest firms; Wingfield is an active builder in both Carolinas

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
310 **$44,450**	—	**309** **254** **units**	**Hal Porter Homes** 1280 Central Blvd. Brentwood, Calif. 94513 Hal Porter	For calendar year 1989, this privately held company built and sold 240 single-family detached units for a sales volume of $30,300,000 and 14 single-family attached homes for a sales volume of $5,400,000. Sales volume for non-residential construction brought $2,250,000 and land sales generated another $6,500,000. The detached homes averaged 1400 sq. ft. and sold for an average price of $140,000, while the attached units averaged 2200 sq. ft. and sold for $400,000. The company builds only in Calif.
311 **$44,000**	317	**289** **285** **units**	**Westfield Development** 33973 Hunt Club Road Gurnee, Ill. 60031 Roger B. Gatewood	For calendar year 1989, this privately held company built and sold 192 single-family detached homes for a sales volume of $34,000,000 and 93 single-family attached units for a sales volume of $10,000,000. The average size of the detached homes was 2400 sq. ft. and the average sale price was $168,000. For the attached units the average size was 1,400 sq. ft. and the price was $107,000. The company builds in Ill. (90%) and Fla. (10%). The company employs 21-50 people and subcontracts 100% of construction work.
312 **$43,935**	273	**353** **185** **units**	**John B. Canuso Inc.** P.O. Box 688 Voorhees, N.J. 08043 John B. Canuso	This privately held company built and sold 160 single-family detached homes for a sales volume of $41,935,000 and 25 single-family attached units for a sales volume of $2,000,000. The detached homes averaged 2600 sq. ft. and sold for an average price of $260,000. Attached units averaged 1200 sq. ft. and a price of $80,000. The company builds only in N.J., subcontracts 81%-99% of its construction work and employs 21-50 people.
313 **$43,700**	345	**355** **182** **units**	**Chriedon Communities** 9900 W. Sample Rd. Coral Springs, Fla. 33065 Laurie J. Frost	For calendar year 1989, this privately held company built and sold 182 single-family detached homes for a sales volume of $36,480,000. Land sales generated $7,250,000. The detached homes averaged 2200 sq. ft. and sold for an average price of $180,000. The company builds only in Fla., subcontracts 100% of construction work and employs 21-50 workers.
314 **$43,611**	—	**117** **998** **units**	**Mercedes Homes** 380 N. Wickham Melbourne, Fla. 32935 Keith Buescher	For fiscal year ending 1/31/90, this privately held company built and sold 598 single-family detached houses for a sales volume of $36,135,600. The company also manufactured 400 single-family panelized units. Land sales generated $7,265,998; rental income and management fees brought $1,676; interest and miscellaneous income added $207,444. The single-family detached homes averaged 1650 sq. ft. and sold for an average price of $60,400. The company builds only in Fla., subcontracts 100% of its construction work and employs 51-100 workers.
315 **$42,532**	367	**286** **290** **units**	**Leader Enterprises Inc.** 6056 Resources Memphis, Tenn. 38134 Kirk Bailey	For calendar year 1989, this subsidiary of Leader Federal Bank for Savings in Memphis, Tenn., built and sold 290 single-family detached homes for a sales volume of $34,009,241. Land sales brought $7,745,052 and rental income and management fees generated $778,000. The detached homes averaged 2400 sq. ft. and sold for an average price of $110,956. The company builds in Tenn. (98%) and Ala. (2%). There are 21-50 employees and the company subcontracts 81%-99% of its construction work.
316 **$42,000**	—	**296** **272** **units**	**Broadmoor Homes** 5405 Oberlin Drive San Diego, Calif. 92121 George J. Nicholas	This privately owned company built and sold 272 single-family detached homes for a sales volume of $42,000,000. The company builds only in Calif. and has 21-50 employees.
317 **$41,784**	—	**118** **992** **units**	**Jacobsen Manufacturing** P.O. Box 368 Safety Harbor, Fla. 34695 Robert Jacobsen	For calendar year 1989, this privately held company manufactured 992 mobile homes for a sales volume of $26,784,000. Rental income and management fees generated $5,000,000, and miscellaneous ventures added another $10,000,000. The company sold 100% to retirees. The company employs more than 100 workers.
318 **$41,696**	269	**276** **303** **units**	**Michaels Group** P.O. Box 887 Latham, N.Y. 12110 James W. Michaels	For calendar year 1989, this privately held company built and sold 64 single-family detached homes for a sales volume of $18,259,989 and 239 single-family attached units for a sales volume of $22,901,687. Land sales generated an additional $444,100 and rental income and management fees generated $90,013. The detached units averaged 2500 sq. ft. and sold for an average price of $285,312. The single-family attached units averaged 1500 sq. ft. and sold for an average of $111,594. Apartment condos averaged 1000 sq. ft. and sold for $90,418. Rental apartments averaged 1000 sq. ft. and rent for $700 per month. The company builds only in N.Y.
319 **$41,518**	—	**330** **216** **units**	**Kingsway Development Corp.** 3838 Camino del Rio N. San Diego, Calif. 92108 Earl Cohen	For calendar year 1989, this privately held company built and sold 216 single-family detached homes for a sales volume of $29,875,271. Non-residential construction brought another $8,000,000 and rental income and management fees generated $785,000. Interest, loan fees and servicing fees combined for an additional $2,857,397. The detached units averaged 1800 sq. ft. and sold for an average price of $138,311. The majority of buyers were families with children (35%), followed by young married couples with no children (25%), empty-nesters (20%), and singles and retirees (20%). The company builds only in Calif., subcontracts 81%-99% of construction work and employs 21-50 workers.
320 **$41,293**	309	**92** **1279** **units**	**Wingfield Contruction** P.O. Box 2324 Greenville, S.C. 29602 Richard S. McAdams	This subsidiary of U.S. Shelter Corp. built and sold 67 single-family detached units for a sales volume of $7,351,687. In addition, 1212 apartments were built for the company's own investment with a market value of $33,941,807. Single-family detached units averaged 2100 sq. ft. at an average price of $150,000. Rental apartments averaged 890 sq. ft. Retirees accounted for 100% of unit sales. The company builds in S.C. (80%) and N.C. (20%).
321 **$41,058**	357	**273** **309** **units**	**Mangano Company Inc.** 1840 S. Central Ave. Visalia, Calif. 93277 Andrew D. Mangano	For calendar year 1989, this privately held company built and sold 309 single-family detached homes for $27,000,000. Land sales added another $3,295,821 and non-residential construction generated $9,951,822. The single-family detached units averaged 1513 sq. ft. and had an average sales price of $90,000. The company builds only in Calif., subcontracts 81%-99% of construction work and employs 21-50 workers.

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Dimcas and LeCesse Corp. help to set the building pace in the solid Florida market

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
322 $40,960	349	399 10 units	**Dimcas Inc.** 621 SW 72nd Ave. Pembroke Pine, Fla. 33023 W. Phil McConaghey	For calendar year 1989 this privately held company built and sold 10 single-family detached homes for a sales volume of $1,260,000. High-rise residential units numbered 324 for a sales volume of $38,880,000. Non-residential construction brought in $800,000 and management fees added $20,000. Single-family detached units averaged 2300 sq. ft. and sold for an average price of $126,000. Rental apartments averaged 1020 sq. ft. and rent averaged $1950 per month. Sales went to retirees (97%) and families with children (3%). The company builds only in Fla., subcontracts 81%-99% of work and employs 1-5 workers full time.
323 $40,807	365	304 260 units	**Estridge Cos.** 148 W. Carmel Drive Carmel, Ind. 46032 Paul E. Estridge	For calendar year 1989, this privately held company built and sold 218 single-family detached units for a sales volume of $35,710,000 and 42 single-family attached homes for $3,234,000. Land sales generated $1,863,000. The detached homes averaged 2250 sq. ft. and sold for an average price of $130,000. The single-family attached homes averaged 1100 sq. ft. and sold for $78,000. The company builds only in Ind., subcontracts 81%-99% of construction work, and employs 51-100 workers.
324 $40,052	373	317 243 units	**Capital Homes Maryland** 8965 Guilford Rd. Columbia, Md. 21046 D. Terrence MacHamer	For fiscal year ending 9/30/89, this subsidiary of Trafalgar House Residential built and sold 36 single-family detached homes for a sales volume of $10,037,000 and 207 single-family attached homes for a sales volume of $25,590,000. Land sales generated $4,425,000. The detached units averaged 2500 sq. ft. and sold for an average price of $278,990. Single-family attached units averaged 1584 sq. ft. and sold for $146,990, while apartment condos averaged 1275 sq. ft. with an average sale of $118,490. The company builds only in Md., subcontracts 100% of construction work and employs 51-100 people.
325 $40,046	312	370 161 units	**DeLuca Enterprises Inc.** 842 Durham Rd. Newtown, Pa. 18940 Alfonso DeLuca	This company built and sold 121 single-family detached units for a sales volume of $26,418,780 and 40 single-family attached units for a sales volume of $5,230,000. Non-residential construction added a sales volume of $1,605,900, land sales brought $5,224,770, rental income and management fees totaled $1,381,742 and interest income generated $185,000. The detached units averaged 3000 sq. ft. and sold for an average of $288,145. The attached units averaged 1400 sq. ft. and sold for an average of $130,000. Company builds in Pa. (85%) and N.J. (15%).
326 $40,000	—	352 186 units	**Alden Company** 411 Borel Ave. 606 San Mateo, Calif. 94402 Kip Jones	For calendar year 1989, this privately held company built and sold 186 single-family detached homes for a sales volume of $40,000,000. Building only in Calif., the detached homes averaged 2300 sq. ft. and sold for an average price of $215,000. The firm subcontracts all of its construction work and employees 11-20 people.
326 $40,000	—	334 212 units	**LDM Development Inc.** 25241 Pase De ALC-105 Laguna Beach, Calif. 92653 Laurence R. Lizotte	For fiscal year ended Feb. 28, 1990, this privately held company built and sold 212 single-family attached homes for a sales volume of $40,000,000. Built only in Calif., the attached units averaged 1300 sq. ft. and sold for an average price of $188,680. The company sells 25% of its product to each of four buyer types: singles, young married couples, empty-nesters and retirees. The firm subcontracts all of its construction work and employs 11-20 people.
326 $40,000	224	157 736 units	**Centron Cos.** 3025 112th Ave. N.E. Bellevue, Wash. 98009 James W. Summers	For calendar year 1989, this privately held company built 736 apartments for investors at a sales volume of $40,000,000.
329 $39,753	358	288 287 units	**RWS Development Co.** 9650 W. 194th St. Mokena, Ill. 60448 Robert W. Strutz	For calendar year 1989, this privately held company and its two subsidiaries, Illinois Builder Supply Co., and RWS Properties Corp., built and sold 146 single-family detached homes for sales of $20,279,400. The firm also built 141 single-family attached units for sales of $16,623,900. Land sales totaled $2,121,000 and revenues from Illinois Builder Supply added $729,000. The detached houses averaged 2000 sq. ft. and sold for about $138,900, while the attached units averaged 1650 sq. ft. for a price tag of $117,900. Building only in Ill., the company sells product to families with children (50%), young married couples (25%), singles (15%) and empty-nesters (10%). The company subcontracts 81%-99% of its work and employs 51-100 people.
330 $39,514	269	370 161 units	**Foster Brothers Inc.** 3975 University Dr. 200 Fairfax, Va. 22030 Arthur E. Foster	For fiscal year ended July 31, 1989, this company built and sold 97 single-family attached units for a sales volume of $14,104,000 and 64 single-family detached units for sales of $13,020,000. Non-residential construction for the fiscal year totaled $8,300,000 and rental income and management fees brought in $4,090,500. The detached homes averaged 2000 sq. ft. and sold for about $203,430, while the attached units averaged 1600 sq. ft. for sales of $145,400. Families with children bought 60% of the units, followed by young married couples at 20%, singles 10%, and empty-nesters and retirees at 5% each. The company builds only in Va., with non-residential construction consisting of hotels/motels. The firm subcontracts 81%-99% of its construction and employs 51-100 people.
331 $39,250	—	106 1060 units	**Flournoy Construction** P.O. Box 6566 Columbus, Ga. 31995-6566 John F. Flournoy	For calendar year 1989, this privately held company and its two subsidiaries, Flournoy Development Co., and Flournoy Properties, built 1058 apartments for its own investment at a market value of $36,000,000. The company also built 2 single-family detached homes for sales of $250,000. Non-residential construction totaled $3,000,000. The apartments averaged 1075 sq. ft. with monthly rents about $500. Families with children are the sole market. The company is active in Ga. (32%), Ala. (30%), S.C. and Fla. (19% each). The company is diversifying into commercial/industrial construction, and currently builds industrial plants and office buildings. It subcontracts 81%-99% of its work and employs 21-50 people.
332 $39,000	199	105 1090 units	**LeCesse Corp.** 1412 W. Colonial Drive Orlando, Fla. 32804 Salvador F. LeCesse	For calendar year 1989, this privately held company built and sold 1000 single-family attached units for sales of $21,000,000 and 90 single-family detached homes for a sales volume of $8,000,000. Non-residential construction totaled $10,000,000 for the year.

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Diversified Crowell & Baker generates revenues from home construction, remodeling and non-res

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
333 **$38,625**	185	**395** **28 units**	**Harshberger Construction Corp.** 5928 Pascal Ct. Carlsbad, Calif. 92008 David Harshbarger	For the fiscal year ended March 31, 1989, this privately held company built 17 single-family detached homes for a sales volume of $22,500,000 and it built 11 single-family attached units for sales of $11,000,000. Non-residential construction brought an additional $5,100,000 for the fiscal year, with rental income and management fees adding $25,000. Building only in Calif., the detached houses averaged 5200 sq. ft. and sold for about $1.5 million. The attached units averaged 4300 sq. ft. for a sales tag of $1 million. Empty-nesters bought 90% of the units and retirees the other 10%. Its non-res construction consisted of shopping centers and retail stores. The company employs 21-50 people and subcontracts 81%-99% of its construction activity.
334 **$38,550**	—	**200** **526 units**	**Klutts Homes Inc.** 1433 Emerywood Drive Charlotte, N.C. 28210 J. V. Klutts Sr.	For the 1989 calendar year, this privately held company and its 2 subsidiaries built and sold 180 single-family detached homes for a sales volume of $18 million, and it also built 346 apartments for its own investment with a market value of $16,000,000. Land sales accounted for $1,050,000 and other income was $3,500,000. The apartments averaged 1000 sq. ft. with monthly rents about $550. The company builds only in N.C. and subcontracts all of its construction. The firm employs 21-50 people.
335 **$38,277**	350	**212** **468 units**	**Oberer Development Co.** 4324 Webster St. Dayton, Ohio 45414 George R. Oberer	For the 1989 calender year, this privately held company and its three subsidiaries, Gold Key Homes, Gold Key Realty and Gold Key Real Estate, built and sold 114 single-family attached homes for a sales volume of $10,458,242. It also built 70 single-family detached homes for sales of $12,427,506. In addition the company built 284 apartments for its own investment at a market value of $12,500,000. Rental income and management fees totaled $2,491,000. Land sales accounted for $400,000. The detached homes averaged 2300 sq. ft. and average $152,066, while the attached homes averaged 1800 sq. ft. for a sales price of $101,356. The apartments average 900 sq. ft. with monthly rents about $600. The company sells to families with children (60%) and empty-nesters (40%). It builds only in Ohio and Ky., and subcontracts all of its work. It employs 51-100 people.
336 **$38,168**	196	**375** **146 units**	**Kennedy Homes Ltd.** 3721 Ventura Dr. Arlington Heights, Ill. 60004 William Kennedy	For the 1989 calendar year, this privately held company built and sold 146 single-family detached homes for sales of $35,868,000. Non-residential construction added an additional $2,300,000. The detached home averaged 2500 sq. ft. and sold for $245,500. Families with children were the primary buyers (75%), followed by young married couples (15%), and 5% each for singles and empty-nesters. The company builds only in Ill., with its non-res product being office buildings. All of the firm's construction activity is subcontracted and 21-50 people work for the company.
337 **$38,154**	293	**107** **1056 units**	**Contempri Homes Inc.** Stauffer Industrial Park Taylor, Pa. 18504 Victor DePhillips	For the 1989 calendar year, this subsidiary of ESI Industries, Dallas, manufactured and sold 889 single-family modular homes for a sales volume of $29,994,714 and 167 multi-family modular units for $8,154,506. The detached homes averaged 1629 sq. ft. and sold for $33,745. The attached units averaged 980 sq. ft., and sold for $48,829. The company is active in Conn., Mass., N.J., N.Y., Pa., R.I., Del., Md., Maine, N.H., Va., Vt., and Wyo. The company's non-res construction consists of office buildings, medical buildings and educational buildings. More than 100 people work for the company. It does not subcontract any work.
338 **$38,100**	321	**397** **18 units**	**Crowell & Baker Const. Co.** 152 Rollins Ave. Rockville, Md. 20852 Arden Baker	For the calendar year, this privately held company built and sold 15 single-family attached homes for a sales volume of $7,500,000 and 3 single-family detached homes for $7,000,000. The diversified company also completed 4 remodeling jobs for sales of $650,000 and non-res construction totaled $17,500,000. Land sales brought another $5,000,000 and rental income and management fees $450,000. The detached homes averaged 10,000 sq. ft. with a price tag around $2,750,000. The attached units averaged 3000 sq. ft. for $600,000. The company builds only in Md., and sells to families with children (80%), and 10% each to young married couples and empty-nesters. Non-res construction consisted of office buildings and medical buildings. The company employs 21-50 people.
339 **$37,940**	233	**348** **197 units**	**Fieber Group** 62 Fox Ridge Rd. Stamford, Conn. 06903 Norman A. Fieber	For the calendar year, this privately held company built 96 single-family detached homes for a sales volume of $22,000,000 and 101 single-family attached units for $14,000,000. The firm completed 8 renovation jobs for sales of $1,490,000 and land sales accounted for $450,000. The detached units averaged 2800 sq. ft. for $400,000. The attached units averaged 1100 sq. ft. for $140,000. The company builds only in Conn., and its non-res product includes shopping centers and retail stores. It subcontracts 81%-99% of its work and employs 6-10 people.
340 **$37,341**	—	**325** **222 units**	**Grant Companies** 1117 Lone Palm Ave. Modesto, Calif. 95351 Allen Grant	For the 1989 calendar year, this privately held company and its two subsidiaries, Grant Homes and Grant Construction, built and sold 222 single-family detached homes for a sales volume of $31,687,185. Non-residential construction added $3,473,000 and land sales totaled $853,000. Rental income and management fees were $1,229,455, and an auto center added $98,000. The single-family detached home averaged 1850 sq. ft. and sold for an average price of $175,000. Families with children bought half the units, with young married couples, empty-nesters and retirees buying 15% each. Singles bought 5% of the units. The company builds in Calif. (80%) and Wash. (20%). Non-res construction consisted of shopping centers, warehouses, office buildings and hotels/motels. It subcontracts 81%-99% of construction activity and it employs 21-50 people.
341 **$37,297**	—	**316** **244 units**	**Elam G. Stoltzfus Jr. Inc.** 474 Mt. Sidney Road Lancaster, Pa. 17602 Elam G. Stoltzfus Jr.	For fiscal year ended Sept. 1, 1989, this privately held company built and sold 173 single-family detached houses for a sales volume of $26,071,796, and it built 19 single-family attached homes for $2,364,386. Also, the company built 52 apartments for investors with a market value of $2,063,745. The company completed 4 remodeling jobs for $170,077. Non-res construction amounted to $6,626,860. The detached units averaged 2000 sq. ft. and sold for $150,700. The attached units averaged 1200 sq. ft. for a sales price of $124,450. Apartments averaged 800 sq. ft. and rent for $485 a month. The company builds only in Pa. Families with children buy 54% of units, young married couples (20%), empty-nesters (17%), retirees (6%), and singles (3%). Non-res construction was office buildings. The company subcontracts 61%-80% of activity and employs 51-100 people.
342 **$37,270**	284	**326** **220 units**	**Christopher Cos.** 8290 Old Courthouse Rd. Vienna, Va. 22180 Frederick A. Kober	In 1989, this privately-held company built and sold 152 single-family attached houses for sales of $22,618,696. It built 68 single-family detached houses for $12,776,052. Land sales generated $975,000 and rental income and management fees another $150,000. Interest from financing activities came to $750,000. The detached homes averaged 2300 sq. ft. and sold for an average price of $187,883, while the attached units averaged 1200 sq. ft. for $148,807. The company builds in Va. (80%) and Md. (20%). The company subcontracts 21%-40% of construction activity and it employs 51-100 people.

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Moore Associates builds more than 1000 rental units; Homestead Properties taps the retiree market

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
343 **$36,922**	—	**315** 246 units	**Marrano/Marc Equity Corp.** 2730 Transit Road Buffalo, N.Y. 14884 Patrick Marrano	For the 1989 calendar year, this privately held company built 232 single-family detached houses for a sales volume of $35,655,000 and it built 14 single-family attached units for $1,267,000. The detached homes averaged 2400 sq. ft. and sold for $153,700. The attached units averaged 1300 sq. ft. with a sales tag of $90,500. The company sells to families with children (63%), young married couples (16%), singles and empty-nesters (10% each) and retirees (1%). The company builds only in N.Y. It subcontracts all of its work and employs 21-50 people.
344 **$36,835**	385	**102** 1159 units	**Harold Moore Associates** P.O. Box 756 Fayetteville, Tenn. 37334 Bill Landers	For the 1989 calendar year, this privately-held company built 117 single-family attached homes for sales of $4,000,000. It also built 1042 apartments for investors at a sales volume of $30,739,000. Non-res construction was $2,096,000. The attached condos averaged 1400 sq. ft. and sold for $65 per sq. ft. The apartments averaged 900 sq. ft. and rent for about $30 per sq. ft. The company is active in Tenn., Ala., N.C. and Fla. Non-res construction consisted of office buildings and medical buildings. It subcontracts 81%-99% of its work and employs 21-50 people.
345 **$36,681**	114	**334** 212 units	**Miller and Smith Homes Inc.** 1568 Spring Hill Rd., 400 McLean, Va. 22102 Robert Young Jr.	For the fiscal year ended Sept. 30, 1989, this privately held subsidiary of Miller and Smith Inc., built 183 single-family attached homes for sales of $30,094,786. It also built 29 single-family detached homes for $6,586,206. Building only in Va., the attached homes averaged 1500 sq. ft. and sold for $164,000. The detached homes averaged 2000 sq. ft. with a price tag of $227,000. The company celebrated its 25-year anniversary in 1989. It subcontracts 81%-99% of its construction work and employs 51-100 people.
346 **$36,428**	391	**264** 333 units	**Homestead Properties** 1820 S. Canal Drive Homestead, Fla. 33035 Ami Tanel	For fiscal year ended Dec. 31, 1989, this privately held company built 187 single-family attached units for sales of $14,615,000 and 146 single-family detached homes for $12,563,000. Non-res activity totaled $8,000,000 and land sales were $500,000. Rental income and management fees came to $750,000. The detached homes averaged 1766 sq. ft. and sold for $104,200. The attached units averaged 1414 sq. ft. for $83,900. Retirees make up 80% of sales, followed by empty-nesters (16%), young married couples (3%), and singles (1%). Company builds only in Fla. Its non-res activity consists of industrial plants, restaurants and rec buildings. The company employs more than 100 people and subcontracts 61%-80% of its work.
347 **$36,264**	229	**293** 281 units	**Coventry Financial Inc.** 3875 N. 44th St. Phoenix, Ariz. 85018 Joseph Contadino	For the 1989 calendar year, this privately held company and its subsidiaries, Coventry Homes and Universal Homes, built and sold 267 single-family detached homes for $32,384,000 and 14 single-family attached units for $1,045,000. Land sales came to $2,674,000 and other income was $161,000. Building only in Ariz., the detached homes averaged 2000 sq. ft. and sold for $121,000. The attached units averaged 1300 sq. ft. with a price tag of $75,000. All of its construction activity is subcontracted and it employs 21-50 people.
348 **$36,112**	—	**241** 392 units	**Royce Homes Inc.** 14614 Falling Creek Houston, Texas 07768 Michael G. Manners	For the calendar year, this privately held company built 392 single-family detached homes for sales of $36,112,000. Net income was 2.5% of total dollar volume. The homes averaged 2400 sq. ft. and sold for $92,000. Families with children bought 69% of homes, followed by young married couples (20%), singles and empty-nesters (5% each) and retirees (1%). The company builds only in Texas, and it subcontracts all of its activity. It employs 51-100 people.
349 **$36,100**	366	**266** 325 units	**Wynne Building Corp.** 12804 S.W. 122nd Ave. Miami, Fla. 33186 Joel F. Wynne	For the fiscal year ended March 31, 1990, this privately held company built 325 single-family detached units for sales of $15,700,000. One remodeling job generated $2,100,000. Land sales came to $1,700,000. Rental income and management fees were $16,600,000. The detached homes averaged 1450 sq. ft. and sold for $33 per sq. ft. Building only in Fla., the company sold 85% to retirees and 15% to families with children. Non-res construction consisted of warehouses and restaurants. More than 100 people work for the company, and it subcontracts 61%-80% of its work.
350 **$35,700**	—	**369** 163 units	**Reynolds Construction** 111 S. Marshall El Cajon, Calif. 92020 Mike Reynolds	This privately held company reports that in calendar year 1989 it built and sold 163 detached single-family homes, all in Calif., to achieve the stated dollar volume. Those homes averaged 2300 sq. ft. and sold for an average of $260,000. The firm employs between 10 and 20 persons full time.
351 **$35,500**	364	**258** 345 units	**Homes by Dave Brown** 2164 E. Broadway Rd. Tempe, Ariz. 85282 David M. Brown	The privately held company, splitting its activity equally between Ariz. and Nev., built 345 single-family detached homes in calendar 1989. Demographic breakdown of its customers included 30% young marrieds without children, 30% families with children, 20% empty-nesters and 10% each singles and retirees. Employing more than 100 persons full time, the firm subcontracts virtually all its construction work.
351 **$35,500**	337	**326** 220 units	**Henry Fischer Builder** 1035 Eaton Dr. Ft. Wright, Ky. 41017 Henry K. Fischer	This privately held company built and sold 220 single-family detached homes totaling $35,000,000 and added land sales of $500,000 in calendar 1989. Operating almost equally in Ky. (56% of total volume) and Ohio, the firm targets families with children as its principal market, with 75% of sales coming here. Young marrieds with no children account for 15% of sales, with singles and empty-nesters splitting the remainder. More than 80% of the construction is subcontracted. The firm has more than 100 full-time employees.
353 **$35,231**	332	**329** 217 units	**D&S Development** 11650 Riverside North Hollywood, Calif. 91602 Bryon Lasky	This privately held company built and sold 170 single-family detached homes valued at $24,496,000 and 47 multifamily units at $5,935,000. Land sales of $4,627,000 and rental income and management fees of $173,000 complete the picture. Detached homes average 1600 sq. ft. at $144,000. Attached average 950 sq. ft. at $126,000. Operations are in both Calif. (90%) and Nev. Families with children accounted for 69% of homes sold. Young marrieds with no children (12%), singles (3%) and empty-nesters and retirees (8% each) complete the mix. The firm reports between 20 and 50 full-time employees and subcontracts all construction work.
354 **$35,180**	313	**127** 912 units	**PLH Corp.** P.O. Box 27 Selinsgrove, Pa. 17870 Roger Lyons	For the calendar year, this privately held company manufactured 762 single-family modular units for $31,180,000 and 150 multi-family modular units for $4,000,000. The detached units averaged 1680 sq. ft. for $40,000 and the attached unit averaged 1000 sq. ft. for $27,000. The company is active in Pa., N.J., N.Y., Conn., R.I., Md., Mass., Fla., Del., Va., and the U.S. Virgin Islands. The company acquired Integri Homes, a modular manufacturing operation in Fla. Non-res construction consisted of hotels/motels, medical buildings and educational buildings. The company does not subcontract any work and employs more than 100 people.

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Hills targets buyers in Ohio, Kentucky and Indiana; Arker Cos. is active in New York State

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
355 **$34,966**	—	**308** 257 units	**Communities Const. Corp.** 1555 Palm Beach Lakes Blvd. West Palm Beach, Fla. 33401 E. Lloyd Ecclestone III	This privately-held company in calendar 1989 built and sold 57 single-family detached homes totaling $15,604,518 and 32 single-family attached units at $7,080,663. The firm also built 168 rental units for its own investment at $10,080,000. Rental and management fees of $2,220,264 complete the picture. Detached homes average 2204 sq. ft. and $273,763. Attached for sale units are 1958 sq. ft. and $221,270. Rentals are $525 per month for 1100 sq. ft. Empty-nesters (50%) and retirees (23%) account for the bulk of this firm's Fla. market. Families with children (12%), young marrieds with no children (10%), and singles (5%) complete the mix. All work is subcontracted and the firm has between 20 and 50 full-time employees.
356 **$34,804**	329	**255** 355 units	**New Fortis Corp.** P.O. Box 485 King, N.C. 27021 Marvin D. Gentry	This privately-held company's entire production for 1989 was in 355 single-family homes, all in N.C. markets. The homes average 1695 sq. ft. in size. Primarily directed to a young market with childless couples accounting for 44% of sales, singles for 26%, and families with children for 20%. Divorced people with children (3%), empty-nesters (4%) and retirees (3%) account for the remainder of sales. Employing between 50 and 100 full-timers, the firm subcontracts all construction.
357 **$34,606**	—	**364** 166 units	**Robert Gibbs Co.** 3191-A Airport Loop Dr. Costa Mesa, Calif. 92626 Robert C. Gibbs	All of the privately held firm's volume in calendar year 1989 was in 166 single-family detached units built in four Calif. subdivisions. The units averaged 2400 sq. ft. in size. Families with children accounted for 45% of sales and empty-nesters for 30%. Young marrieds (15%) and singles and retirees (5% each) account for the rest. All work is subcontracted and the firm has between 20 and 50 full-time employees.
358 **$34,205**	303	**253** 360 units	**Frank Robino Associates** 5189 W. Woodmill Dr. Wilmington, Del. 19808 Paul A. Robino	The privately-held company in calendar 1989 built and sold 50 single-family detached homes for $5,972,584 and 190 single-family attached units for $15,054,763. Also built 120 rental units at $6,200,000 for its own investment. The firm also was involved in construction of 95 high-rise apartments at $3,099,936, did a $472,784 remodeling job, completed non-res jobs totaling $1,905,765, sold land valued at $550,000, realized rental and management income of $568,819, and reported miscellaneous income of $379,901. Bulk of work (96%) was in Del. with rest in Pa. Single-family detached units average 2100 sq. ft. in size and $120,000 in price. Single-family attached came in at 1260 sq. ft. and $79,000. Condos average 1180 sq. ft. in size and sold at an average price of $96,000. The average 900 sq. ft. apartments rented for $500 per month. The firm also built warehouses, office buildings and completed two assisted living facilities. Employing between 50 and 100 people, the firm subcontracts more than 80% of its construction.
359 **$34,000**	299	**389** 50 units	**Arker Companies** 1015 Cedar Lane Woodmere, N.Y. 11598 Allan and Sol Arker	The privately-held company reported calendar 1989 construction and sale of 50 detached single-family homes at $20,000,000. The homes averaged 4000 sq. ft. in size. Forty remodeling jobs brought $7,000,000 in revenues. A like amount came from non-residential construction. All work was performed in N.Y. Singles and empty-nesters each accounted for 30% of sales. Young marrieds with no children and families with children split the remainder of the market. The firm subcontracts more than 80% of construction and employs between 20 and 50 persons full time.
360 **$33,956**	326	**294** 280 units	**Doyle Wilson Homebuilder Inc.** 8310 Capital of Texas Hwy. Austin, Texas 78731 Clark Wilson	Entire volume of this privately held company in calendar 1989 was accounted for by 280 single-family detached homes averaging 2500 sq. ft. in size. All construction was in Texas. Families with children accounted for 63% of sales. Other buyers included 15% young marrieds with no children, 10% singles, 7% empty-nesters and 5% retirees. All work is subcontracted and the firm has between 20 and 50 full-time employees.
361 **$33,840**	372	**342** 204 units	**Goodman Homes Inc.** 1424 Gables Ct. Plano, Texas 75075 Stephen L. Goodman	Single-family detached homes numbering 204 accounted for all but $1,200,000 of the volume of this privately held company during the fiscal year ending May 31, 1989. That amount was accounted for by rental income and management fees. The average home built by the company contained 2600 sq. ft. of space. Building only in Texas, the firm targets 60% of its production to families with children. The remainder breaks out 15% to young marrieds with no children, 10% each to singles and empty-nesters and 5% to retirees. Employing between 20 and 50 persons full-time, the firm subcontracts between 60% and 80% of its construction.
362 **$33,673**	325	**204** 510 units	**Fryling Construction** 2100 Chicago Drive S.W. Wyoming, Mich. 49509 Robert E. Fryling	The privately held company in calendar year 1989 concentrated mainly on apartments built for investors, completing 509 units at a cost of $28,878,000. The firm also built one $1,870,000 single-family home. Non-residential construction—industrial plants, religious buildings, offices, hotels and motels and restaurants—added another $2,775,000. The firm also had rental income and management fees totaling $150,000. The typical apartment (all were built in Mich. contained 950 sq. ft. and rented for $575. The firm employs between 50 and 100 persons full time and subcontracts more than 80% of its construction.
363 **$33,569**	254	**345** 201 units	**Brehm Communities** 2835 Camino Del Rio South San Diego, Calif. 92108 Forrest W. Brehm	This privately held company reported 116 single-family homes built and sold for $22,444,900 for the fiscal year ended June 30, 1989. Single-family attached units totaled 85 and brought $11,124,000. All construction was in Calif. Detached single-family units averaged 1745 sq. ft. in size at $193,491 per home. Attached units averaged 1149 sq. ft. and $130,871. Families with children accounted for 65% of the units sold. Other markets included young marrieds without children (26%), singles (7%) and retirees (2%). All work is subcontracted and the firm reports between 20 and 50 full-time employees.
364 **$32,993**	334	**207** 499 units	**Hills Developers Inc.** 7420 Montgomery Road Cincinnati, Ohio. 45236 Stephen Guttman	This privately held company reports that calendar year 1989 saw completion and sale of 15 detached single-family homes for $2,400,000 and 314 attached single-family units for $19,492,800. Also, the company built 170 rental units for its own investment at $5,100,000 and realized $6,000,000 in rentals and management fees. The average single-family home contained 1600 sq. ft. and sold for $160,000. Attached units, all condominiums, contained 965 sq. ft. of space at a cost of $62,000 on average. Apartments, also 965 sq. ft. in size, rented for $525. The firm builds not only in its home state, but also in Ky. and Ind. Singles, at 35%, and young marrieds without children, at 32%, make up the bulk of the market. Rounding out the figures are empty-nesters (16%), families with children (10%) and retirees (7%). Firm employs between 50 and 100 persons full time and subcontracts more than 80% of construction.

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
365 $32,730	359	181 600 units	**John Cooley Co.** 36250 Dequindre Sterling Heights, Mich. 48310 Dale N. Scrace	This subsidiary of Dart Properties, Inc., reports the construction of 600 apartments valued at $25,500,000 for its own investment during calendar 1989. Eight remodeling jobs worth a total of $1,400,000 and non-residential work (industrial plants, office and medical buildings) at $5,830,000 completes the total. The firm subcontracts more than 80% of its work and employs between 20 and 50 persons full time.
366 $32,620	340	360 176 units	**Medici Inc.** 18818 Teller Ave. Irvine, Calif. 92715 Gregory DiRienzo	This privately held company reported in calendar year 1989 that it built 119 detached single-family homes at a value of $21,000,000 and 57 attached units at $10,540,000. The firm also recorded $1,080,000 in land sales. Splitting its work equally between Calif. and Nev., the firm's market mix breaks out at 40% families with children, 35% empty nesters, 20% young marrieds without children and 5% singles. All work is subcontracted and the firm has between 20 and 50 full-time employees.
367 $32,448	—	258 345 units	**Charles Rutenberg Housing Group** 2901 US Highway 19 N. Clearwater, Fla. 34621 Mark Rutenberg	This privately held company reports building and selling 314 single-family detached units at $29,878,770 and 31 attached units at $2,505,351, all in Fla., during calendar 1989. Also included is $63,543 in rentals and management fees. Detached units averaged 1900 sq. ft. in size at a price of $94,000. Primary markets were families with children (45%), retirees (33%), and empty-nesters (12%). Singles and young marrieds with no children each accounted for 5% of sales. All work was subcontracted and the firm employs between 20 and 50 people full time.
368 $32,200	—	263 294 units	**Bovis Brunning Homes** 498 Palm Springs Drive Altamonte Springs, Fla. 32701 Arthur Tye	For calendar year 1989, this subsidiary of P&O Group, London, England, reported 294 single-family detached homes built and sold for a total of $29,500,000. Firm also sold $2,700,000 in land. The homes average 1600 sq. ft. in size. Primarily building in Fla., 95% of the volume is there with the remainder in Georgia. Families with children account for 50% of the sales, with young marrieds at 30%, singles at 10%, retirees at 6% and empty-nesters 4%. All work is subcontracted and the firm has between 10 and 20 full-time employees.
369 $32,000	—	243 390 units	**Jeffrey H. Tamkin Inc.** 11755 Wilshire Blvd. Los Angeles, Calif. 90025 Jeffery Tamkin	This privately held firm reports building 390 congregate care living units for investors during calendar 1989 in Calif. and Nev. All construction is subcontracted and the firm has between 10 and 20 full-time employees.
370 $31,766	377	379 128 units	**Sabatello Companies** 631 U.S. Hwy. 1 N. Palm Beach, Fla. 33408 Carl M. Sabatello	Privately held company reported building and selling 50 single-family detached units at a total of $15,172,117 and an additional 78 attached single-family units at a total of $15,563,810. Also included was $1,030,000 in rental income or management fees. Detached units averaged 2850 sq. ft. and sold for an average of $303,442. Attached units averaged 1800 sq. ft. and $199,536. All were built in Fla., with families with children accounting for 60% of units sold. Other market segments were retirees (20%), empty-nesters (10%) and young marrieds with no children (10%). Employing between 20 and 50 people full time, the firm subcontracts more than 80% of its construction work.
371 $31,761	—	284 292 units	**Drake Homes** P.O. Box 1448 Chico, Calif. 95927 John D. Drake	Privately held, the firm reports for fiscal year ending Jan. 31, 1990, building and selling 238 detached single-family homes for $28,006,000. Also built 54 apartment units for investors for $1,655,000. Land sales of $2,100,000 round out the total. Operating only in Calif., the firm targets families with children at 45% of its market. Young marrieds without children, empty-nesters and retirees each claim a 15% share with singles at 10%. Employing between 20 and 50 persons full time, the company subcontracts more than 80% of its construction work.
372 $31,700	283	275 304 units	**Iacobucci Organization** 2 E.F. Raymond Dr. Havertown, Pa. 19083 Frank & Anthony Iacobucci	This privately held firm built and sold 300 attached single-family units totaling $30,600,000 and four detached units totaling $500,000 during calendar year 1989. Non-residential construction worth $600,000 rounded out the total. Detached units averaged 1400 sq. ft. in size. Attached units were 1280 sq. ft. and averaged $105,900 each. Also in the mix were 1080 sq. ft. condominiums at an average of $90,000. The firm builds 75% of its volume in Pa., the rest in N.J. More than 80% of construction volume is subcontracted and the firm employs between 50 and 100 persons full-time.
373 $31,556	346	334 212 units	**Parker Lancaster Corp.** 711 Moorefield Park Dr. Richmond, Va. 23236 J. Russell Parker III	This privately held company in calendar year 1989 built 212 single-family detached units at a value of $30,369,238. Non-residential construction added $426,292 and management fees and miscellaneous income another $760,051. The average home built by the company contained 1959 sq. ft. of space. The firm builds in Va. (81%) and N.C. Families with children accounted for 72% of sales. Empty nesters (14%), young marrieds with no children (11%) retirees (2%) and singles (1%) complete the picture. The firm subcontracts more than 80% of its construction work and employs between 20 and 50 full-time.
374 $30,900	360	146 787 units	**Clark-Wayland-Tarver** 4117 N. 44th St. Phoenix, Ariz. 85018 Jere L. Clark	Rental housing built for investors is the name of this privately held company's game: 787 such units built in calendar 1989. Construction equally split between Ariz. and Nev. Employing between 10 and 20 people full time, the firm subcontracts more than 80% of its construction work.
375 $30,860	324	323 225 units	**Williamsburg Properties** 423 Wards Corner Road Loveland, Ohio 45140 William R. Ryan	This privately held firm reported 1989 calendar year figures at 150 single-family detached units totaling $22,500,000 and 75 single-family attached units at $6,000,000. Also included were $2,360,000 in land sales. Detached units averaged 2100 sq. ft. and $136,000 each. Attached units averaged 1600 sq. ft. and $80,000. Families with children accounted for 51% of sales. Other key segments were young marrieds without children (28%), empty-nesters (8%), singles (7%) and retirees (6%). Ohio was the scene of 80% of the firm's activity with the remainder in Ky. Firm subcontracts more than 80% of its construction work and employs between 50 and 100 people full time.

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E.M. Harris focuses on the young family segment; Stonehedge diversifies into non-res and remodeling

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
376 **$30,695**	395	295 278 units	**Lan Ron Builders** 23041 Avenida de la Carlota Laguna Hills, Calif. 92653 Grover C. Brown Jr.	This privately held company in calendar year 1989 built and sold 135 single-family detached units for $14,565,000. It also manufactured 128 mobile homes for $10,440,000 and 15 modular units for $1,510,000. Rental income and management fees totaled $4,180,000. Detached product averaged 1500 sq. ft. for $105,000. Sales were to retirees (50%), families with children (30%), empty-nesters (10%), singles (5%) and young married, no children (5%). Firm is active in Calif. (60%), Fla. (35%) and N.Y. (5%). It has between 51 and 100 full-time employees.
377 **$30,499**	392	262 341 units	**Hearndon/Rosewell Cos.** 2010 Old Greenbrier Rd. Chesapeake, Va. 23320 William Hearring & Paul Farrell	This privately held company in calendar year 1989 built and sold 113 single-family detached units for $10,872,513 and 52 single-family attached units for $3,328,000. It also built 176 apartments with a market value of $7,500,000 for its own investment. Land sales totaled $3,403,926. Rental income and management fees generated $4,281,313. Miscellaneous income accounted for $1,112,870 in revenues. Firm is active in Va. and N.C. It has between 21 and 50 full-time employees. Subsidiaries include O.G.V. Associates, South Court Associates and Knells Ridge Associates.
378 **$30,344**	—	368 165 units	**Grayson Homes Inc.** 9025 Chevrolet Dr. Ellicott City, Md. 21043 Floyd F. Grayson Jr.	This privately held company in fiscal year ended 9/30/89 built and sold 95 single-family detached units for $21,303,900 and 70 single-family attached units for $9,040,395. Detached product averages 2500 sq. ft. of space for $224,252. Attached product averages 2000 sq. ft. of space for $129,149. Sales were to families with children (80%), singles (10%) and young married, no children (10%). Firm employs between 21 and 50 people full time.
379 **$30,229**	384	337 210 units	**Mayer Homes** 1799 New Smizer Mill Rd. St. Louis, Mo. 63026 J. Randall Mayer	This privately held company in calendar year 1989 built and sold 210 single-family detached units for a sales volume of $27,641,150. Land sales were $85,000. Rental income and management fees amounted to $913,689. Miscellaneous income totaled $1,588,931. Detached product averaged 2100 sq. ft. of space for $131,600. Sales were to families with children (50%), young married, no children (25%), singles (10%), empty-nesters (10%) and retirees (5%). Firm is active solely in Mo. It employs between 21 and 50 people full time. Subsidiaries include Mayer Homes Realty, Mayer Bros. Construction, and J.R. Mayer Management.
380 **$30,224**	351	384 109 units	**J.P. Rhoades Development** P.O. Box 1973 Santa Ana, Calif. 92702 Jeffrey P. Rhoades	This privately held company in calendar year 1989 built and sold 109 single-family detached units for $28,695,000. Rental income and management fees totaled $1,225,000. Miscellaneous income amounted to $304,000. Detached product averages 2377 sq. ft. of space for $263,257. Firm is active solely in Calif. It has between 11 and 20 full-time employees.
381 **$30,189**	394	196 532 units	**Holiday Builders Inc.** 1901 S. Harbor City Blvd. Melbourne, Fla. 32901 Larry Sietsma	This privately held company in calendar year 1989 built and sold 532 single-family detached units for a sales volume of $30,189,270. Detached product averaged 1288 sq. ft. of space for $51,589. Sales were to families with children (41%), retirees (24%), young married, no children (18%), singles (9%) and empty-nesters (8%). Firm is active solely in Fla. It has between 21 and 50 full-time employees.
382 **$30,100**	—	247 379 units	**E.M. Harris Bldg.** 1749 Gilsinn Fenton, Mo. 63026 Frank M. Ganninger	This privately held company in calendar year 1989 built and sold 117 single-family detached units for $15,000,000. It also built 262 apartments with a market value of $15,000,000 for investors. Rental income and management fees totaled $100,000. Detached product averaged 1900 sq. ft. of space for $145,000. Sales were to families with children (95%) and young married, no children (5%). Firm is active solely in Mo. It employs between 21 and 50 people full time. Harris Distributing is a subsidiary.
383 **$29,917**	363	359 177 units	**Channing Corporation** 11 Via Verona Palm Beach Gardens, Fla. 33418 Joel B. Channing	This privately held company in fiscal year ended 7/31/89 built and sold 177 single-family detached units for $29,917,382. Detached product averaged 1687 sq. ft. of space for $169,025. Sales were to empty-nesters (30%), families with children (25%), young married, no children (20%), retirees (20%) and singles (5%). Firm is active solely in Fla. It has between 21 and 50 full-time employees.
384 **$28,985**	—	383 110 units	**Lowder Construction Co.** 2000 Interstate Park Dr. Montgomery, Ala. 36142 James K. Lowder	This privately held company in calendar year 1989 built and sold 110 single-family detached units for $10,647,722. Non-res construction of shopping centers, office buildings, restaurants and banks accounted for $17,952,852. Land sales totaled $384,840. Detached product averaged 1850 sq. ft. of space for $110,000. Sales were to families with children (65%) and young married, no children (35%). Firm is active in Ala. (75%) and Fla. (25%). It has between 21 and 50 full-time employees.
385 **$28,800**	—	331 215 units	**Bradley Construction** P.O. Box 6875 Clearwater, Fla. 33518 Richard B. Funk	This privately held company in calendar year 1989 built and sold 51 apartments with a market value of $2,200,000 for investors and 164 apartments with a market value of $10,200,000 for its investment. Remodeling and rehabilitation jobs accounted for $3,100,000 in revenues. Non-res construction of mini-warehouses brought $3,500,000. Land sales amounted to $500,000. Rental income and management fees totaled $9,300,000. Rental apartments averaged 1050 sq. ft. of space for $600 per month. Firm is active in Fla. (90%) and Ga. (10%).
386 **$28,600**	338	374 151 units	**Hayden Company** One The Pines Court St. Louis, Mo. 63141 C. Barry Hayden	This privately held company in calendar year 1989 built and sold 96 single-family detached units for $18,150,000 and 55 attached units for $10,000,000. Non-res construction of office condos had a market value of $250,000. Miscellaneous income amounted to $200,000. Detached product averaged 2500 sq. ft. of space for $75,500. Attached product averaged 2000 sq. ft. of space for $91,000. Firm is active solely in Mo. It has between 21 and 50 full-time employees.
387 **$28,296**	375	332 214 units	**Stonehedge Const. Co./ The Mungo Co.** 4400 St. Andrews Road Columbia, S.C. 29210 M. Stewart Mungo	This privately held company in calendar year 1989 built and sold 206 single-family detached units for $16,645,000. It also built 8 apartments with a market value of $440,000 for its own investment. Remodeling and rehabilitation jobs accounted for $1,325,000 in revenues. Non-res construction of office buildings totaled $300,000. Land sales amounted to $8,780,000, while rental income and management fees brought $486,000 in revenues. Miscellaneous income totaled $320,000. Detached product averaged 1450 sq. ft. of space for $82,500. Rental apartments averaged 1250 sq. ft. of space for $575 per month. Firm is active solely in S.C. It has between 21 and 50 full-time employees.

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Stokes-Collins built 300 detached homes in 1989; Trilex Properties ranks 400th among the Giants

RANK BY REVENUES $ (000)	LAST YEAR'S RANK	RANK BY UNITS	COMPANY, ADDRESS, PRINCIPAL OFFICER	OPERATING PLAN
388 **$28,000**	355	**372** **160 units**	**Westway Construction Corp.** 250 W. River Drive St. Charles, Ill. 60174 James N. Urhausen	This privately held company in fiscal year ended 9/30/89 built and sold 160 single-family detached units for a sales volume of $26,648,000. Remodeling and rehabilitation jobs brought $289,000 in revenues. Non-res construction of office buildings had a market value of $1,063,000. Detached product averaged 2300 sq. ft. of space for $166,000. Sales were to families with children (60%), empty-nesters (15%), young married, no children (15%), retirees (7%) and singles (3%). Firm is active solely in Ill. It has between 51 and 100 full-time employees.
389 **$27,800**	331	**391** **47 units**	**Garden State Land Group** 101 Interchange Plaza Cranbury, N.J. 08512 Joseph Millstein	This privately held company in calendar year 1989 built and sold 47 single-family detached units for a sales volume of $23,000,000. Rental income and management fees totaled $4,800,000. Detached product averaged 4000 sq. ft. of space for $489,000. Sales were to families with children (60%), young married, no children (20%) and empty-nesters (20%). Firm is active solely in N.J. It has between 51 and 100 full-time employees.
390 **$27,700**	183	**279** **300 units**	**Stokes-Collins & Co.** 9000 Byper Green Drive Jacksonville, Fla. 32256 J. Daniel Collins	This privately held company in calendar year 1989 built and sold 300 single-family detached units for $27,000,000. Land sales accounted for $700,000 in revenues. Detached product averaged 1650 sq. ft. of space for $90,000. Sales were to families with children (75%), young married, no children (18%), empty-nesters (5%) and singles (2%). Firm is active solely in Fla. It has between 21 and 50 full-time employees.
391 **$27,599**	369	**297** **276 units**	**Good Value Homes** 1460 93rd Lane, N.E. Blaine, Minn. 55434 Betty Hardle	This privately held company in calendar year 1989 built and sold 198 single-family detached units for $20,718,257 and 78 single-family attached units for $5,369,171. Non-res construction of warehouses accounted for $633,900 in revenues. Land sales brought $877,940. Detached product averaged 1417 sq. ft. of space for $104,638. Attached product averaged 1056 sq. ft. of space for $68,836. Sales were to families with children (45%), young married, no children (25%), singles (15%), empty-nesters (10%) and retirees (5%). Firm is active solely in Minn.
392 **$27,459**	341	**392** **47 units**	**Value Group Inc.** 1122 Clifton Ave. Clifton, N.J. 07013 Andrew Abramson	This privately held company in fiscal year ended 8/31/89 built and sold 47 single-family attached units for $9,564,000. Rental income and management fees totaled $17,895,000. Attached product averaged 2200 sq. ft. of space for $280,700. Apartment condominiums averaged 978 sq. ft. of space for $99,300. Sales were to empty-nesters (60%), young married, no children (15%), retirees (15%) and families with children (10%). Firm is active solely in N.J. It has between 51 and 100 full-time employees. Subsidiaries include Princeton Landing Construction Co., Inc., Shongum Associates, and Rickland Associates.
393 **$27,300**	—	**318** **235 units**	**C.P. Morgan Co.** 1980 E. 116th St. Carmel, Ind. 46032 Charles P. Morgan	This privately held company in calendar year 1989 built and sold 215 single-family detached units for $24,900,000 and 20 single-family attached units for $1,400,000. Non-res construction brought $1,000,000. Detached product averaged 1900 sq. ft. of space for $116,000. Attached product averaged 1100 sq. ft. of space for $70,000. Sales were to families with children (30%), singles (25%), young married, no children (25%), empty-nesters (10%) and retirees (10%). Firm is active solely in Ind.
394 **$27,150**	—	**339** **206 units**	**California Homes** 3031 W. March Lane Stockton, Calif. 95207 Pat Matthews	This privately held company in fiscal year ended 3/31/90 built and sold 187 single-family detached units for $25,250,000 and 19 single-family attached units for $1,400,000. Non-res construction of office buildings had a market value of $500,000. Firm is active solely in Calif. It employs between 21 and 50 people full time.
395 **$26,200**	323	**357** **178 units**	**Radnor Homes Inc.** 5544 Franklin Road Nashville, Tenn. 37220 David C. McGowan Jr.	This subsidiary of Radnor Corp. in calendar year 1989 built and sold 163 single-family detached units for $24,500,000 and 15 single-family attached units for $1,500,000. Land sales totaled $200,000. Detached product averaged 2400 sq. ft. of space for $150,000. Attached product averaged 1750 sq. ft. of space for $100,000. Sales were to families with children (50%), empty-nesters (20%), singles (10%), young married, no children (10%) and retirees (10%). Firm is active in Tenn. (65%) and Ky. (35%). It has between 51 and 100 full-time employees.
396 **$26,017**	—	**277** **301 units**	**Colony Homes L.P.** Woodstock, Ga. 30188 T. Bradbury/Bonneau Ansley Jr.	This privately held company in calendar year 1989 built and sold 301 single-family detached units for a sales volume of $26,017,038. Detached product averaged 1515 sq. ft. of space for $86,159. Sales were to young married, no children (37%), families with children (32%), singles (29%), empty-nesters (1%) and retirees (1%). Firm is active solely in Ga. It employs between 51 and 100 people full time.
397 **$25,867**	400	**270** **312 units**	**Circle T Corp.** 1801-D East Parkcourt Santa Ana, Calif. 92701 Harry Tancredi	This privately held company in fiscal year ended 6/30/89 built 312 apartments for its own investment with a market value of $18,542,000. Land sales brought $2,315,000 in revenues. Rental income and management fees totaled $4,320,000. Miscellaneous income amounted to $690,000. Rental apartments averaged 700 sq. ft. of space for $650. Firm is active solely in Calif. It has between 11 and 20 full-time employees.
398 **$25,600**	362	**285** **291 units**	**Key Company** 1020 East Wendover Greensboro, N.C. 27420 John M. Garrity	This publicly held corporation in fiscal year ended 10/31/89 built and sold 201 single-family detached units for $19,700,000 and 90 single-family attached units for $5,200,000. Land sales accounted for $600,000 in revenues. Miscellaneous income amounted to $100,000. Detached product averaged 1800 sq. ft. of space for $100,000. Attached product averaged 1200 sq. ft. of space for $58,000. Apartment condominiums averaged 1000 sq. ft. of space for $52,000. Sales were to families with children (50%), empty-nesters (25%) and young married, no children (25%). Firm is active solely in N.C. It has between 51 and 100 full-time employees.
399 **$25,488**	—	**307** **258 units**	**Tobin Co.** 5151 East Broadway Tucson, Ariz. 85711 Saul Tobin	This privately held company in calendar year 1989 built and sold 234 single-family detached units for $22,280,000 and 24 single-family attached units for $2,300,000. Remodeling and renovation jobs brought $1,501,000 in revenues. Rental income and management fees generated $868,000. Firm is active in Ariz., Nev. and Fla. It has between 51 and 100 full-time employees.
400 **$25,115**	249	**379** **128 units**	**Trilex Properties Inc.** 3264 Villa Lane Napa, Calif. 94550 A.R. Ceresa	This privately held company in calendar year 1989 built and sold 7 single-family detached units for $4,435,000 and 121 single-family attached units for $20,680,000. Detached units averaged 3000 sq. ft. of space for $630,000. Attached units averaged 1550 sq. ft. of space for $175,000. Sales were to retirees (33%), empty-nesters (30%), families with children (15%), young married, no children (14%) and singles (8%). Firm is active solely in Calif.

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295.	Century American
242.	Century Homes
121.	Cenvill Development Corp.
51.	Champion Home Builders Co.
383.	Channing Corp.
313.	Chrisdon Communities
342.	Christopher Cos.
292.	Ciotti Construction Co.
397.	Circle T Corp.
44.	Citation Builders
374.	Clark-Wayland-Tarver Inc.
53.	Clayton Homes Inc.
235.	Cloverleaf Properties Inc.
126.	Coleman Homes Inc.
396.	Colony Homes Ltd.
78.	Colson & Colson Constr. Co.
142.	Commodore Corp.
355.	Communities Construction Corp.
241.	Community Construction Inc.
49.	Condiotti Enterprises Inc.
337.	Contempri Homes Inc.
172.	Continental Financial Corp.
80.	Continental Homes Holding
365.	John Cooley Co.
129.	Cooper Communities Inc.
133.	John M. Corcoran & Co.
31.	Coscan Development Corp.
255.	Costain Homes Inc.
347.	Coventry Financial Inc.
234.	Covington Development Group
267.	Crosswinds Communities
1.	Trammell Crow Residential
338.	Crowell & Baker Const. Co.
147.	Crowell Industries Inc.
105.	Custom Living Communities Inc.
175.	David Cutler Group

D.

Rank	Company Name
353.	D&S Development
229.	Davidson Communities
325.	DeLuca Enterprises Inc.
301.	DeLuxe Homes of Pa.
183.	Di Loreto Construction
322.	Dimcas Inc.
143.	Diversified Homes
94.	Dividend Development Corp.
90.	DiVosta & Company
157.	Dominion Developments Inc.
371.	Drake Homes
101.	Drees Co.
123.	Duffel Financial & Const.
108.	Dunmore Homes Inc.

E.

Rank	Company Name
58.	Elliott Homes Inc.
138.	Embrey Associates Inc.
132.	Emerald Homes L.P.
202.	Engle Group Inc.
264.	Epoch Properties Inc.
268.	Estes Home Building
323.	Estridge Cos.
156.	Evans Withycombe Inc.

F.

Rank	Company Name
32.	Fairfield Communities
164.	Fairfield Homes
339.	Fieber Group
29.	Fieldstone Company
275.	First Financial Group
351.	Henry Fischer Builder Inc.
18.	Fleetwood Enterprises
331.	Flournoy Construction
200.	Fogelman Properties
93.	Forecast Mortgage Corp.
59.	Forest City Enterprises
155.	Foreston Development Corp.
330.	Foster Brothers Inc.
169.	FPA Corp.
99.	Fralin and Waldron Inc.
173.	Frankel Enterprises
279.	Friedman Homes
119.	Friendswood/Village Builders
362.	Fryling Construction
226.	Fuqua Homes

G.

Rank	Company Name
389.	Garden State Land Group
96.	GBW Properties
46.	General Homes Corp.
102.	General Development Corp.
112.	Gentry Homes
357.	Robert C. Gibbs Co.
253.	Gigliotti Corporation
86.	GlenFed Development Corp.
195.	Golden West Homes
40.	Goldrich & Kest Industries
391.	Good Value Homes
361.	Goodman Homes Inc.
271.	Graham Cos.
340.	Grant Construction
378.	Grayson Homes Inc.
217.	Gregory Group
57.	Griffin Homes
54.	Grupe Co.
307.	Guerdon Industries
239.	Gulfstream Land & Development

Rank	Company Name
H.	
115.	Habitat Company
310.	Hal Porter Homes
116.	Thomas P. Harkins Inc.
382.	Harris Building
333.	Harshbarger Construction Corp.
386.	Hayden Co.
377.	Hearndon/Rosewell Cos.
154.	Heritage Development Group
364.	Hills Developers Inc.
223.	Hillside Residential Inc.
136.	Hoffman Homes
66.	Hofmann Company
381.	Holiday Builders Inc.
166.	Holiday Organization Inc.
305.	Holly Corp.
140.	Holtzman & Silverman Const.
34.	Home Capital Development Group
351.	Homes by Dave Brown
210.	Homes of Merit Inc.
249.	Homestead Development Co.
88.	Homestead Land Development
346.	Homestead Properties
278.	Homestead Group Association
150.	L.J. Hooker Homes
141.	Horton Homes Inc.
24.	Hovnanian Enterprises Inc.
274.	Hughes-Patwil Homes
52.	Hunt Building Corp.
220.	Hylton Group
I.	
372.	Iacobucci Organization
212.	Inco Homes
81.	International American Homes
222.	Interstate General Co.
237.	ITT Community Homes
J.	
317.	Jacobsen Manufacturing
100.	James Lewis Corp.
176.	JCC Enterprises
56.	J.L. Construction
269.	JMC (John Mourier)
179.	J.E. Jones Construction Co.

Rank	Company Name
K.	
97.	Kaplan Organization
6.	Kaufman and Broad Home Corp.
227.	Joe Keim Builders Inc.
336.	Kennedy Homes Ltd.
188.	Kettler Brothers Inc.
273.	Kettler Forlines Inc.
398.	Key Company
91.	Kimball Hill Inc.
319.	Kingsway Development Corp.
334.	Klutts Homes Inc.
228.	Kopf Construction Corp.
L.	
131.	John Laing Homes
376.	Lan Ron Builders
186.	Landstar Homes
144.	Larwin Construction Co.
326.	LDM Development Inc.
315.	Leader Enterprises Inc.
332.	LeCesse Corp.
118.	Leisure Technology Inc.
23.	Lennar Corp.
167.	Levitt Corporation
19.	Lewis Homes Group of Cos.
69.	Lexington Development
293.	Liberty Homes Inc.
3.	Lincoln Property Co.
284.	Lindal Cedar Homes
20.	Linpro Company
236.	Lockwood Group
75.	Lokey Companies
161.	Long Signature Homes
384.	Lowder Construction Co.
197.	Luckey Co.
17.	Lusk Co.
87.	Lycon Group
4.	William Lyon Co.
M.	
12.	MDC Holdings Inc.
321.	Mangano Company
262.	Manning Company
343.	Marrano/Marc Equity Co.
76.	J.L. Mason Group Inc.
379.	Mayer Homes
84.	McBail Co.
221.	McBride & Son Enterprises
139.	R.B. McComic Inc.
113.	McKellar Communities
55.	McMillin Cos.
366.	Medici Inc.
148.	Meeker Development Co.
314.	Mercedes Homes
178.	Michael Andrew Group
318.	Michaels Group
281.	Milburn Investments
291.	Miles Homes Inc.
345.	Miller and Smith Cos.
146.	Milton Co.
208.	Mitchell Co.
344.	Harold Moore Associates
393.	C.P. Morgan Co.
171.	Morris General Building Co.

Rank	Company Name
N.	
216.	Nanticoke Homes Inc.
308.	National Enterprises Inc.
356.	New Fortis Corp.
45.	Newhall Land & Farming Co.
287.	Newmark Home Corp.
70.	Newport Pacific Development
231.	North American Housing Corp.
7.	NVR L.P.
O.	
151.	Oakwood Homes Corp.
335.	Oberer Development Co.
212.	Oceanic Properties Inc.
149.	Olympia/York
244.	Orange Blossom Hills Inc.
158.	Oriole Homes Corp.
254.	Orleans Construction Corp.
21.	Oxford Development Corp.

Rank	Company Name
P.	
160.	Pacesetter Homes Inc.
39.	Pacific Scene Inc.
269.	Pacifica Corp.
107.	Palm Harbor Homes
10.	Paragon Group Inc.
109.	Paragon Homes Inc.
373.	Parker Lancaster Corp.
214.	Pasquinelli Construction Co.
272.	Patriot Homes Inc.
198.	Patt Organization
263.	Pembroke Enterprises Inc.
191.	Pennhill Co.
38.	J.M. Peters Co.
299.	M.J. Peterson Real Estate
11.	PHM Corp. (Pulte)
98.	Picerne Properties
283.	Pinn Brothers Construction
230.	Planned Residential Comm.
354.	PLH Corp.
65.	Post Properties
153.	Premier Group Inc.
191.	Primark Corp.
181.	Prometheus Development Co.

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Rank	Company Name
Q.	
261.	Quaker Group Builders
R.	
395.	Radnor Homes Inc.
60.	Robert Randall Co.
252.	Rayco Inc. (Ellison Homes)
152.	Raznick & Sons Inc.
247.	Realen Homes
285.	Red Seal Development Corp.
37.	Redman Homes
76.	Regis Homes
209.	Republic Development Co.
350.	Reynolds Construction
206.	RGC-RecreActions Group
380.	J.P. Rhoades Development
103.	Richmarr Construction Corp.
302.	Ritz-Craft Corp. of Pa.
240.	Roberts Properties
61.	Robertson Homes
358.	Frank Robino Associates
218.	Robson Communities
303.	Rocky Gorge Communities
73.	Edward Rose Building Ent.
238.	Michael T. Rose Associates
309.	Roy E. Daly & Co.
348.	Royce Homes Inc.
72.	Arthur Rutenberg Corp.
367.	Charles Rutenberg Housing
329.	RWS Development Co.
276.	Ryder Homes
5.	Ryland Group

Rank	Company Name
S.	
288.	S&A Custom Built Homes
370.	Sabatello Construction
85.	San-T Development Corp.
49.	M/I Schottenstein Inc.
294.	James Schuler & Associates
122.	Schult Homes Corp.
286.	Martin Selko Co.
297.	Sexton Companies
13.	Shapell Industries
300.	Shawntana
30.	Shea Homes
106.	Shelter Canadian Holdings Ltd.
289.	Signature Homes
225.	Signature Properties
137.	Silver Cos.
43.	Skyline Corporation
27.	A.G. Spanos Construction
22.	Standard Pacific L.P.
110.	Stanley Martin Cos.
162.	Sterling Homes Corp.
390.	Stokes-Collins
341.	Elam G. Stoltzfus Jr. Inc.
387.	Stonehedge Construction Co./The Mungo Co.
277.	Stuard-Signature Homes
180.	Summerhill Development
42.	Summit Properties
258.	Sun City Center Corp.
185.	Sunland Communities
62.	Sunrise Company

Rank	Company Name
T.	
369.	Jeffery Tamkins Inc.
170.	Taylor Morley Simon Inc.
165.	Kathryn Thompson Development
399.	Tobin Co.
74.	Toll Brothers Inc.
127.	Tompkins Investment Group
130.	Torino Construction Corp.
204.	Town & Country Homes
399.	Trilex Properties
256.	Trojan Properties Inc.
U.	
15.	U.S. Home Corp.
25.	UDC-Universal Dev.
187.	Union Valley Corp.
177.	United Development Mgmt.
V.	
392.	Value Group Inc.
116.	Van Daele Development
184.	Van Metre Cos.
W.	
194.	Wallick Construction Co.
63.	Jim Walter Homes Inc.
35.	Warmington Homes
163.	Washington Homes Inc.
9.	Watt Industries Inc.
199.	Wausau Homes Inc.
71.	Del E. Webb Communities
95.	Weekley Homes Inc.
114.	Weingarten Siegel Group Inc.
298.	Weinstock Construction Corp.
124.	West Venture Development Co.

Rank	Company Name
232.	Western National Properties
311.	Westfield Development
248.	Weston Development
388.	Westway Construction Corp.
8.	Weyerhaeuser Real Estate Co.
290.	Whitecliff Company
243.	Wick Building Systems
196.	John Wieland Homes
375.	Williamsburg Properties Inc.
360.	Doyle Wilson Homes
64.	George Wimpey Inc.
320.	Wingfield Contruction
83.	Winncrest Homes
41.	Woodcrest Development Inc.
168.	Woodview Development Co.
304.	Wooldridge Organization
349.	Wynne Building Corp.
Z.	
189.	Zale Group
223.	Zaremba Development Co.
251.	Zaring National Corp.
280.	Zicka Homes

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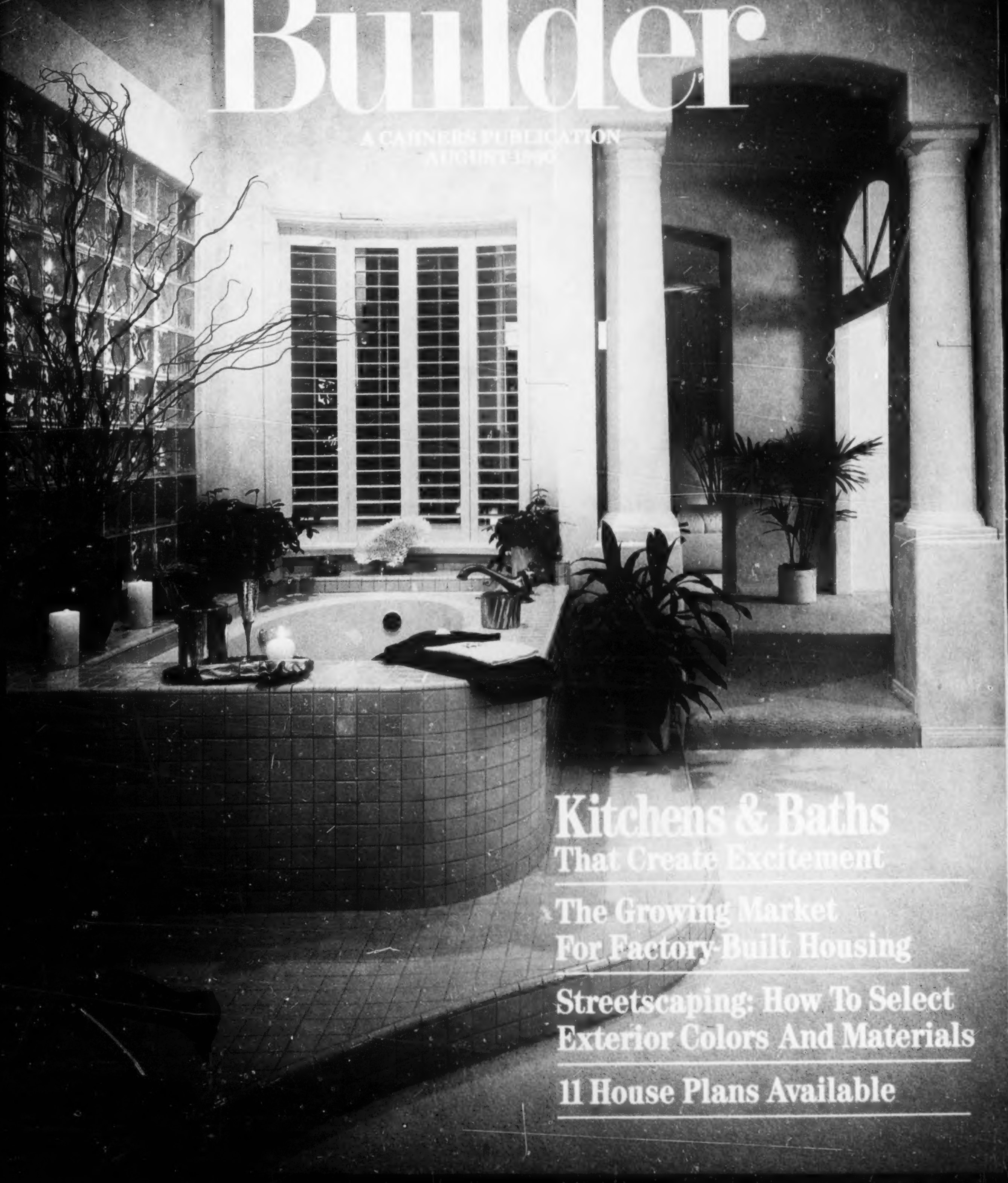

Kitchens & Baths That Create Excitement

The Growing Market For Factory-Built Housing

Streetscaping: How To Select Exterior Colors And Materials

11 House Plans Available

Professional Builder

AUGUST • 1990

VOL. 55

THE MAGAZINE OF HOUSING AND LIGHT CONSTRUCTION/A CAHNERS PUBLICATION

Granite countertops, a built-in cooktop and a wood floor distinguish this TC Communities' showcase kitchen. For more kitchens & baths, see page 86.

Alternate technologies such as stress-skin panel construction are broadening the appeal of the factory-built housing industry. Page 100.

The remodeling challenge posed by this 1950s-era home? Modernize and open up the interior without destroying its charm. Page 117.

FEATURES

Kitchens & Baths That Create Excitement 86

They don't call a model home's kitchen and bath the "power rooms" for nothing. There's probably no other single design element that can more effectively close a sale than well-appointed wet rooms.

The kitchens and baths shown in this feature include an array of designs/amenities. All of these outstanding examples, compiled by senior editors, Dan McLeister and Wayne Endicott, can truly fire the interest of buyers.

The Growing Market For Factory-Built Housing 100

The future looks bright for this segment of the housing industry. According to some informed estimates, by 1993, factory-built housing could account for as much as 27 percent of all housing.

Susan Bady, senior editor, and Eric Benderoff, associate editor, take an in-depth look at several key segments of this market.

Hiring Top Salespeople: Finding Them, Keeping Them 110

The best new home salespeople of the 1990s may not be selling homes today. They may not even be in sales. But almost certainly, say most hiring experts, they aren't builders.

Remodeling Project Of The Month 117

This 1950s-era home in Pasadena, Calif., was a storehouse of memories that couldn't keep up with the current needs of its widowed owner. T.A. Russell Construction restored and highlighted the handcrafted detailing, then met the technical challenge posed by the small, sloping site.

On the Cover

Columns create an elegant step-down entry into the bath at Meeker Development's Palmilla, Laguna Niguel, Calif. Interiors by Carole Eichen Interiors. The designer was Pekarek Crandall. Photographed by Robert Freed.

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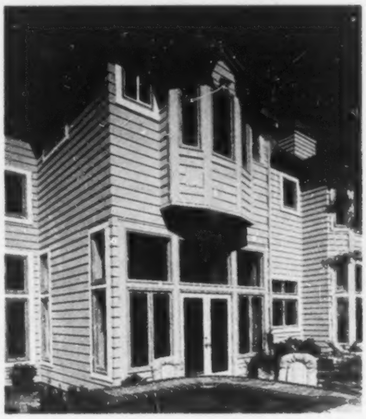

How do exterior colors and materials affect sales? Page 55.

As **rolling recessions** rumble through areas of the country, some builders are seizing opportunities in rebounding markets, others are cutting their losses. In either case, speed is of the essence. Page 22. **Professional Builder & Remodeler** has a series of changes in store for its readers. Page 26. **Exterior colors and materials** can impact a project's success says designer Miriam Tate. Page 55 **Move-up customers** can't buy a new home if they can't unload their old one. Now help may be on the way. Page 62. **Affordable housing** can be provided, say experts, if regulatory barriers can be broken down. Page 75.

Interior product design trends. Page 140.

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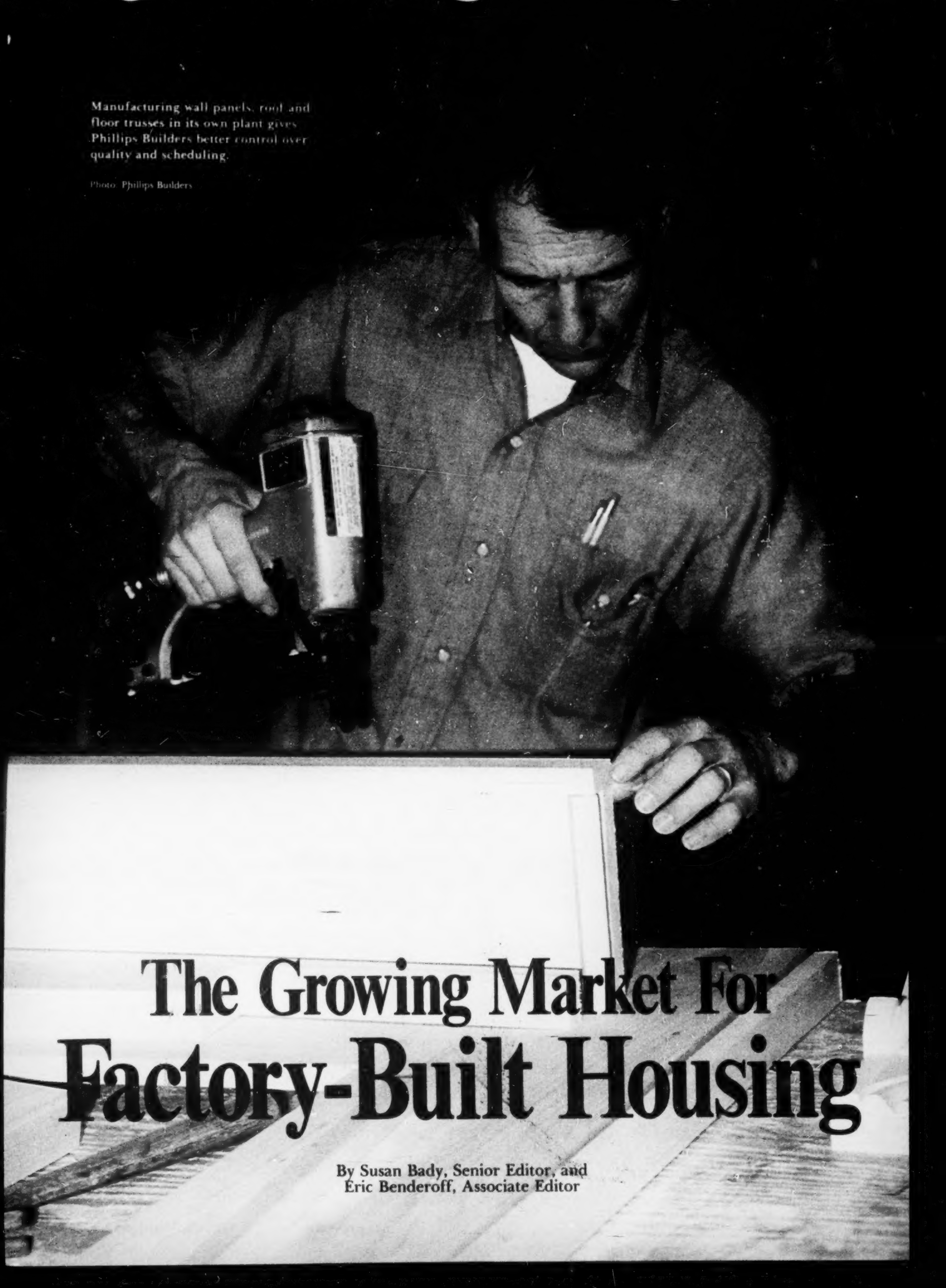

Manufacturing wall panels, roof and floor trusses in its own plant gives Phillips Builders better control over quality and scheduling.

Photo: Phillips Builders

The Growing Market For Factory-Built Housing

By Susan Bady, Senior Editor, and
Eric Benderoff, Associate Editor

By 1993, factory-built housing will account for 27 percent of all housing. As product is upgraded, demand will increase.

Factory-Built Housing Market Growth Projections

Item (000 units)	1970	1988	1993	2000	% Annual Growth 1988/1970	% Annual Growth 1993/1988
Total housing starts (both stick and factory built)	1835	1706	1825	1725	– 0.4%	1.4%
Factory-built housing	532	437	500	550	– 1.1%	2.7%
By type:						
Manufactured housing	401	218	250	250	– 3.3%	2.8%
Modular/sectional	27	69	85	105	5.4%	4.3%
Panelized	88	113	120	135	1.4%	1.2%
Pre-cut packages	16	37	45	60	4.8%	4.0%
By market:						
Single-family	529	403	450	475	– 1.5%	2.2%
Multifamily	3	34	50	75	14.4%	8.0%

Source: The Freedonia Group Inc.

Factory-built housing will have an increasing impact on the housing market during the 1990s.

The first union-built modular housing factory in Chicago will soon begin producing badly needed affordable housing.

According to factory owner Robert Carrane, president of Affordable Housing Inc., the plant will employ 60 workers and produce 14 modular homes per week, each selling for about $59,000. At that price, the houses are within the grasp of families with an annual income as low as $20,000.

His 70,000-square-foot factory, located on Chicago's west side, represents a historic agreement between the leaders of seven building trade unions, including the Carpenters union, Sheet Metal Workers union and Plumbers Chicago Journeymen union.

While Carrane believes modular is the answer to housing shortages throughout urban America, he considers it especially appropriate for Chicago, a city that is subdivided principally into 24- and 25-foot lots. Modular homes fit very well in that configuration, he said.

Carrane foresees a number of modular plant start-ups in Chicago during the next three to five years. "Local unions historically have been reluctant to accept modular construction, but I don't think that reticence exists today," he said.

Study finds emerging growth opportunities

Others besides Carrane are optimistic that the future looks bright for factory-built housing. A recent industry study by the Freedonia Group of Cleveland projects increased shipments of factory-built homes and components, based on what it sees as an overall housing recovery.

Upgrading of all types of building systems will gain consumer acceptance, and replacement demand for manufactured homes (also known as mobile or HUD code homes) will increase. Demand for vacation and second homes will also increase because of rising consumer income levels. As a result, factory-built housing is projected to experience real gains (excluding inflation) of 2.7 percent annually to 500,000 units in 1993, when it will account for 27 percent of total housing.

Many stick builders have successfully protected their markets by incorporating factory-built components and adopting industrialized building techniques. The table shown on this page summarizes past and projected growth of the factory-built housing industry from 1970 through the year 2000.

Industry lobbies for building code reform

Add to this positive growth picture some long-needed relief for modular and manufactured housing producers.

Modular producers are currently subject to a veritable forest of regulations, since each state, county, city and village can institute code changes at will.

In March 1990, Congressman Ben Erdreich, D-Ala., introduced a bill, H.R. 4157, that would establish a national pre-emptive regulatory system for residential and commercial modulars and components. H.R. 4157 leans entirely on the three regional model building codes (BOCA, ICBO and SBCCI). Under the bill, Congress would pre-empt all state and local codes and standards for modulars shipped between states and built to one of the three aforementioned codes.

At press time, the Erdreich bill had been referred to the House committee. Jim Birdsong, executive director of the Building Systems Councils of the NAHB, said he was optimistic hearings would take place before the July 4 Congressional recess.

Meanwhile, representatives of the manufactured housing industry have been lobbying for reform of the National Manufactured

Modulars Are Affordable Choice For Inner-City And Rural Areas

Housing Construction and Safety Standards Act of 1974, the law that set up the HUD code. Proposed changes to the law were included in an omnibus housing bill, H.R. 1180, offered by Rep. Jack Hiler, R-Ind.

The Hiler amendment would modernize an outdated law that was patterned after auto safety legislation. Major provisions of the amendment, which recognizes the industry's role in providing affordable housing, include changing the definition of a "manufactured home" to permit units that do not have a permanent chassis and focusing the enforcement system on major problems instead of minor non-compliances.

Hiler's proposals were adopted by the House subcommittee on housing in May 1990. The subcommittee held hearings on the amendment in May and it was passed by the full banking committee in June. At press time, the bill was pending floor action in the House. □

Steel-Frame Units Save Time, Money, Materials

Modular housing is an ideal product for inner-city sites, where labor is scarce, pilferage is a serious problem and too many potential homeowners are still renters. In rural areas, where many live in substandard housing, modulars can be erected easily and quickly, providing a safe, decent and affordable form of shelter.

For the last six years, DeLuxe Homes of Pa. Inc., Berwick, Pa., has focused two-thirds of its total production on steel-frame modular units used to build affordable housing for inner-city neighborhoods.

"All the materials are fastened and secured before the unit hits the job site," said Don Shiner, vice president of DeLuxe. "This eliminates pilferage to a great degree."

The time frame for construction is considerably shorter as compared to stick or panelized construction, Shiner noted, and the cost of producing the modular units runs 10 percent to 20 percent lower than stick building. The steel frame increases fire resistance.

In five months, DeLuxe has installed 174 units at the project shown in the photo below. Units sell for about $185,000, which is 10 percent to 15 percent below market for New York City. □

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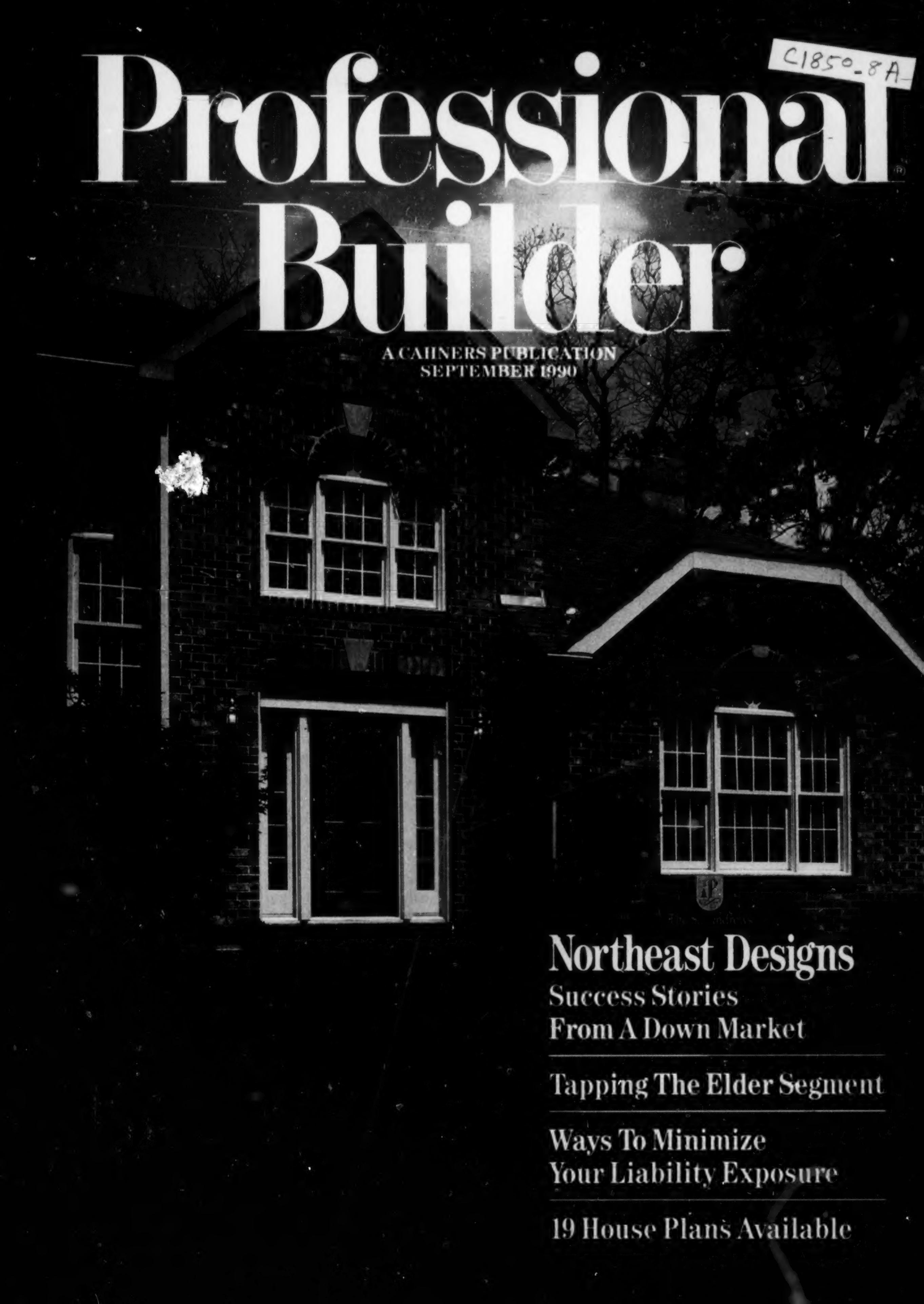
SEPTEMBER 1990



Northeast Designs

Success Stories
From A Down Market

Tapping The Elder Segment

Ways To Minimize
Your Liability Exposure

19 House Plans Available

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SEPTEMBER • 1990

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The well-appointed kitchen/breakfast room is one reason the Invitational model at PineCrest is a best seller. Page 88.

Private apartments and homey public spaces spell seniors market success at Colson & Colson's Montvale Estates. Page 104.

United Development lowered the cost of its Hampton model by offering a traditional exterior that's free of expensive extras. Page 122.

FEATURES

Best Of The Northeast: Success In A Down Market 88

The slowdown in housing activity permeating the Northeast is far from over. Markets throughout this region will need time to recover from the runaway appreciation of the 1980s.

But even with the slow rate of construction and sales, senior editors Sue Bady and David Heinly report that there are bright spots. Successful projects can be found where a balance is struck between those qualities that are determined to yield results.

Graying Of America: Tapping The Elders Segment 104

Every day more than 5000 people turn 65, and the 75-plus age group is the fastest growing segment of the elderly population. The sheer size of this market makes it a tempting target for builders.

But be forewarned—when it comes to housing at least—elders are reluctant consumers. A look at two successful companies: Del Webb Communities and Colson & Colson.

Vacation Housing 114

As baby boomers age, the demographic base of potential second-home buyers is growing. While no longer viable as a tax shelter, it is still desirable to this new generation of buyers. Here are lessons from Palm Beach, Fla.; New Jersey's South Shore; and Lake of the Ozarks, Mo.

The PB Home of Quality, Value & Affordability 122

Quality construction, 2465 square feet of space and a quiet location make United Development Homes' Royal Hill a winner in northwest suburban Chicago.

On the Cover

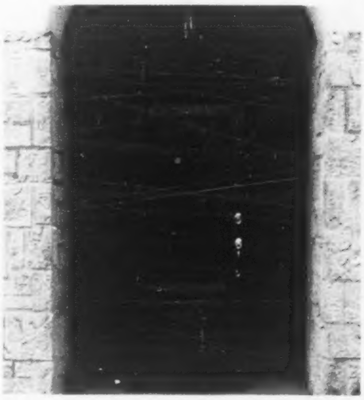
The St. Andrews model is a 3330-square-foot single-family detached model that is part of PineCrest, a residential community in Lansdale Pa. The developer is The Klein Co., Philadelphia. Photography by Fred Forbes.

Professional Builder

THE MAGAZINE OF HOUSING AND LIGHT CONSTRUCTION/A CAHNERS PUBLICATION

Golf's popularity does not assure profitability. Page 55.

High visibility and the perception of deep pockets make builders easy targets for **litigious homeowners**. How to counter this threat? Page 22. Trammell Crow found a pair of winners in **high-density apartment units**. Page 27. The much-publicized **money crunch** is giving remodelers their share of problems, too. Page 41. **Golf** may be America's fastest-growing sport, but building homes on a golf course does not assure sales and profits. Page 55. **Changing your corporate name?** RecreActions shows the proper way to introduce it to the market. Page 60. Costs associated with the government's **proposed accessibility rules** could cause problems. Page 83.



The latest trends in interior and exterior door products. Page 126.

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UPDATE

House Passes Amendments That Modernize HUD Code

The House of Representatives voted July 31 in favor of a package of amendments by Rep. Jack Hiler, R-Ind., that modernizes the National Manufactured Home Construction and Safety Standards Act of 1974 (also known as the HUD code). The House defeated an attempt by Rep. Mary Rose Oakar, D-Ohio, to force all manufactured homes to be designed for relocation even if they are permanently sited.

Congressman Hiler countered that the HUD code's "permanent chassis" requirement is antiquated and that they are unnecessary for permanently sited homes, add needless cost and make it difficult for them to be put on basements. The amendment package, which is part of the 1990 House housing bill, will now be submitted to the House-Senate Conference Committee for discussion.

Los Angeles Leads Nation In New Job Formation

U.S. Bureau of Labor Statistics data through year-end 1989 shows that Los Angeles led all other metropolitan areas in new job formation for the fourth consecutive year, despite an overall job growth rate of less than 2 percent. According to data analysis by M/PF Research Inc., Washington, D.C. trailed Los Angeles in total new jobs but expanded its job base by a much stronger 3.5 percent.

Seattle has been the nation's standout job market over the past two years; its 6.2 percent growth in 1989 exceeded the year-earlier pace by 30 percent. Seattle climbed to third place while Houston continued its recovery, ending the year in fourth place.

New job formation has cooled in all regions except the West as the economy has slowed, the study showed. A few states, however—most notably Ohio and Washington, but also Arizona and Colorado—are creating jobs faster than in 1988. Recovering Cleveland joined the nation's top 20 job markets for the first time.

Michigan Eyes Public/ Private Partnership

Starting Oct. 1, Freddie Mac will make $500 million available to low- and moderate-income home buyers in Michigan through a public/private partnership with the state. Senator Don Riegle, Michigan Governor James Blanchard and Freddie Mac Chairman Leland Brendsel participated in the announcement. Sen. Riegle said the program will enable as many as 10,000 Michigan families to enter the housing market.

Outlook Turns Pessimistic

Only one out of four builders are confident that conditions will get better within the next three months, according to a monthly builder panel survey commissioned by Owens Corning Fiberglas and *PB*. Only 13 percent expect conditions to worsen, while nearly two out of three expect them to remain the same.

Half of the builders polled indicated their model traffic is down compared to this time one year ago.

Builder Confidence Wanes

Do you think that in the next three months, your new housing/remodeling business will:

	Jan.-Feb.	April-May	June-July
Get better?	50.5%	39.6%	23.7%
Get worse?	6.9%	8.9%	13.4%
Remain same?	42.6%	51.5%	62.9%

Source: OCF Contractor Tracker Study

Panelized, Modular Market Shows Steady Increase

The U.S. market for modular and panelized housing is something to watch. According to a study by Frost & Sullivan Inc., growth in these two areas could be startling. In 1989, 61,000 modular units were produced for revenues totaling over $3.47 billion. Frost & Sullivan forecasts a modular market of 121,000 units for 1995, totaling approximately $9.24 billion (1989 dollars).

Panelized production totaled almost 126,000 units in 1989, which the study predicts will reach 153,000 units in 1995. In dollar terms, the 1989 market amounted to just over $4.4 billion, expected to rise to nearly $7.44 billion in 1995.

Banks, Pension Funds Up Mortgage Investments

The Federal National Mortage Association (Fannie Mae) says that mortgage investments are finding increasing favor among commercial banks and pension funds. Bob Sahadi, vice president of mortgage-backed securities for investor marketing at Fannie Mae reports the agency is making a concerted effort to attract pension fund investments in mortgage-backed securities.

He also points out that the interest shown by commercial banks and pension funds is a direct result of the problems of the thrift industry.

Fireplaces Spark Enthusiasm Among Builders, Buyers

–An exclusive study outlines the increasing use of fireplaces in new U.S. homes.

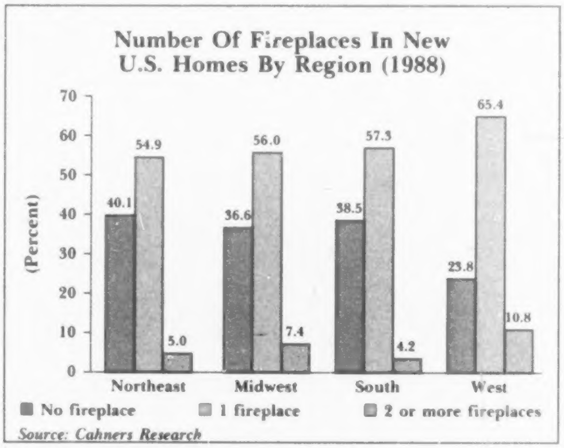
By Andrea LaFreniere, Staff Editor

The fireplace is proving increasingly popular among home builders and buyers, says a recent study prepared for *Professional Builder* by the Bureau of Building Marketing Research.

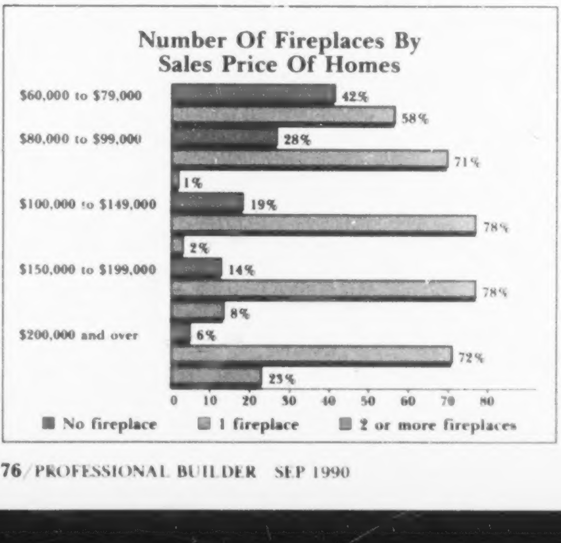
Designed to examine the use of fireplaces in new residential construction, the study reports that in 1988, almost 65 percent of all new single-family residences were furnished with a fireplace. This accounts for most of the 790,000 units that were installed in new single-family homes that year.

The study also suggests that the largest percentage of fireplaces are installed in newly built homes in the West (where fireplaces are most popular), followed by the Midwest and the South, respectively (see chart 1).

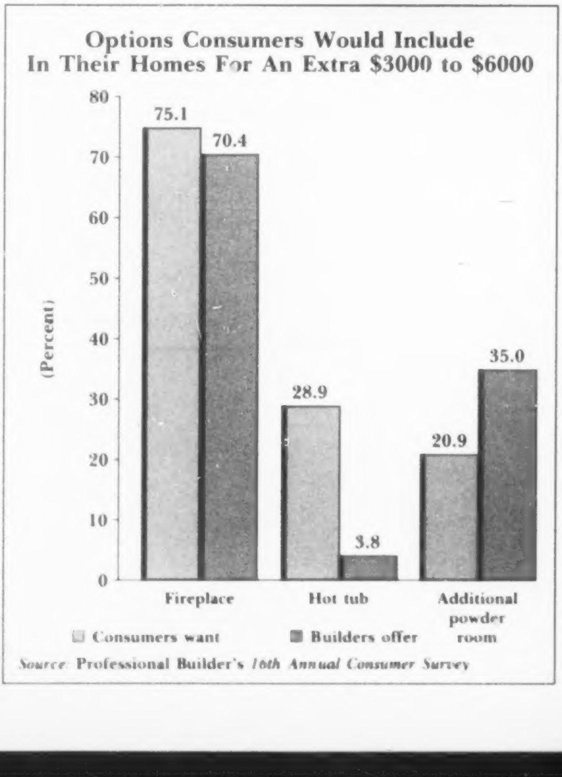
Among other pertinent information uncovered by the report is that the use and number of fireplaces in new single-family homes increase as the price of the home increases (see chart 2). In addition, 75 percent of new-home buyers will opt to include a fireplace in their home. When asked what options they would add to their homes for an extra $3000 to $6000, more than 75 percent of respondents indicated they would prefer a fireplace. □


Number Of Fireplaces In New U.S. Homes By Region (1988)

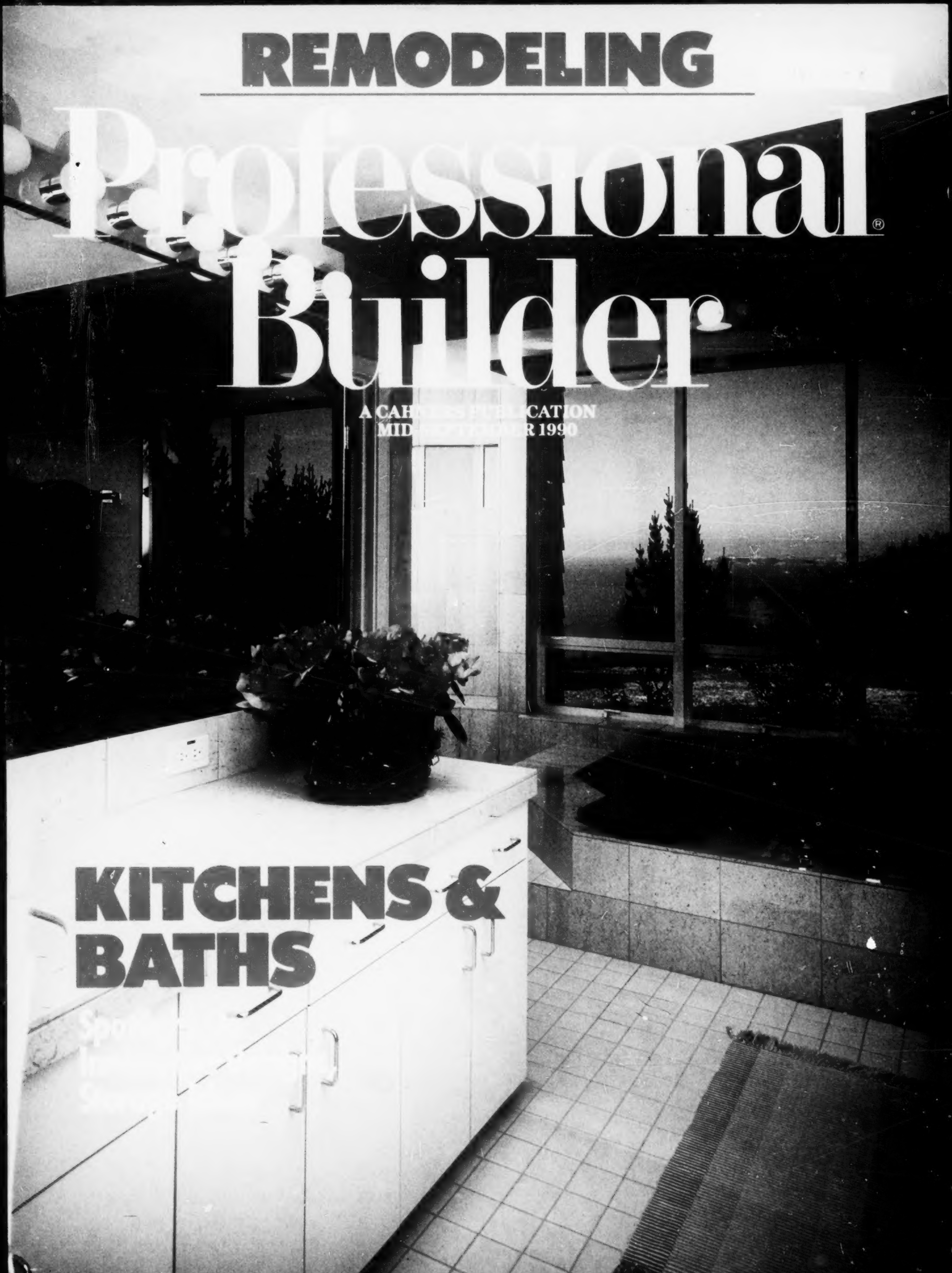
Source: Cahners Research


Number Of Fireplaces By Sales Price Of Homes

Traditionally perceived as the hub of the home, fireplaces are now one of the most sought-after luxury amenities in new housing.


Options Consumers Would Include In Their Homes For An Extra $3000 to $6000

Source: Professional Builder's *16th Annual Consumer Survey*



REMODELING

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MID-SEPTEMBER 1990

KITCHENS & BATHS

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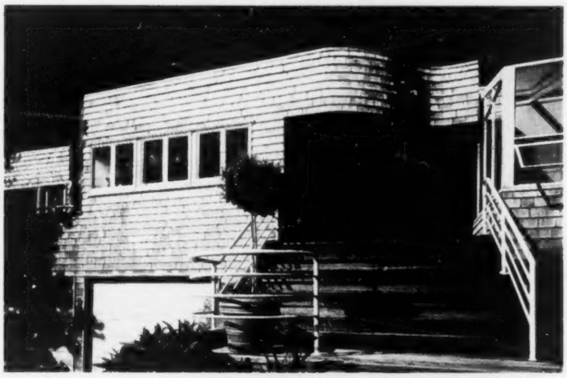
My favorite bath, page 16.



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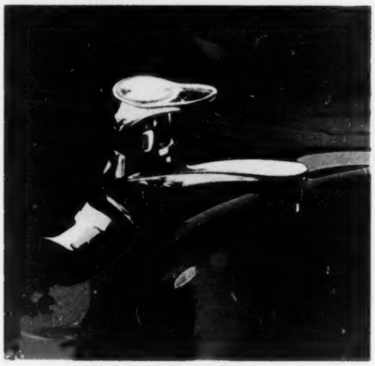

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A sophisticated design solution for a very modest-sized bath. Page 16.
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An old bedroom is converted into a master bath. Page 28.
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In this new decade, white is hot. The projects featured here are typical of trends seen all over the country—remodelers and their clients are specifying white cabinetry and other materials to visually expand interior spaces.

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Upgrading cabinetry and adding to a home's storage capabilities are priorities for homeowners remodeling kitchens and baths. A variety of creative ideas can increase both the utility and charm of a home.

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Seven exciting new plans available.

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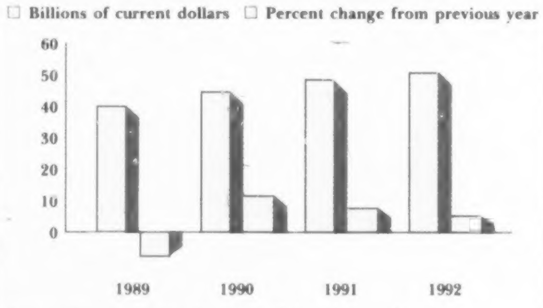
Forecasters Predict Gains In Remodeling Spending

Pent-up demand and continued weakness in the construction market bodes especially well for additions and alterations.

Last year was a very poor one for major home improvement work. While total residential remodeling spending declined by a slight 0.2 percent, spending on addition and alteration work dropped even sharper, by 8 percent. Estimated payments to contractors for residential remodeling work also fell more than overall residential upkeep and improvement spending. Last year's 1.5 percent decline in payments to contractors followed an impressive 13.3 percent gain during 1988.

Cahners Economics' general economic scenario calls for slow, but positive, economic growth for the remainder of this year and through 1992. Interest rates are expected to decline modestly, and personal income gains should continue to match or exceed the inflation rate. Given this macroeconomic background, we expect good gains in residential remodeling spending. Pent-up demand and continued relative weakness in the new home construction market bodes especially well for addition and alteration spending. Homeowners, increasingly making the decision to "move up in place," will be spending dollars on remodeling projects that, under different circumstances, would be going towards payments on a larger mortgage.

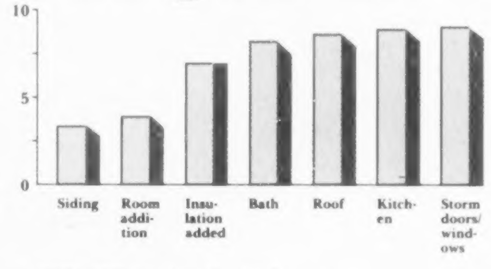
Strong Rebound In Homeowner Spending For Additions And Alterations



Source: Commerce Dept.; forecast by Cahners Economics.

Ownership Changes Trigger Plenty Of Kitchen And Bath Work

(Jobs recent movers most likely to undertake)



Source: HUD's 1987 American Housing Survey.

Contractors Versus DIYers: Who Does The Most Work?

(Percent of remodeling work reported as "Mostly done by household")

	Kitchen remodeling	Bath remodeling
Northeast	52.9%	55.8%
Midwest	61.5%	65.9%
South	52.0%	55.8%
West	51.9%	61.0%

Source: HUD's 1987 American Housing Survey.

The government's recently released 1987 American Housing Survey (AHS) reveals that during the previous two years, an estimated 4,532,000 households remodeled or added a kitchen, while 5,346,000 households remodeled or added a bathroom. About 8 percent of all homeowners had undertaken kitchen repair, improvement or addition work during the 24 months prior to being interviewed, while just over 9 percent of all households were estimated to have undertaken similar work on the bathroom.

Approximately 55 percent of repair and improvement work on kitchens was performed "mostly by household members," while nearly 60 percent of this work on bathrooms was of the "do-it-yourself" variety. Among the 4.5 million kitchen jobs, an estimated 73.4 percent cost $500 or more (the value of household members' time on DIY projects was specifically excluded). A considerably smaller percentage of the 5.3 million bathroom repair and improvement jobs—58.6 percent—were estimated to have cost at least $500. ☐

By Daryl Delano, Cahners Economics, Newton, Mass.

STORAGE SPACE

THE NUMBER ONE CONSUMER DEMAND

Upgrading the quality of cabinetry and adding to a home's storage capabilities are principal priorities for homeowners remodeling kitchens and baths. Here's a look at a variety of creative ideas that increase both the utility and the charm of a home.

By Dan McLeister,
Senior Editor

Just how important is storage to homeowners?

According to the 1990 Remodeling Consumer Study done by *Professional Builder And Remodeler*, when it comes to a rehab project, achieving more and better storage in both the kitchen and bathroom are at the top of nearly every homeowner's list.

Results of this magazine's 1990 New Home Consumer Study back up this claim. Among the most highly prized features in a new home are bonus storage areas: linen closets, pantries and extra closets in bedrooms.

As the homes on the following pages show, there are many ways to meet the high demand for better space. A wine rack tucked in with the cabinets, for example, can add sparkle to a kitchen.

Closets in the bathroom are just as important as cabinets in the kitchen.

In any room, *practicality* and *convenience* are the common denominators that turn a mundane storage area into a special homeowner benefit. □

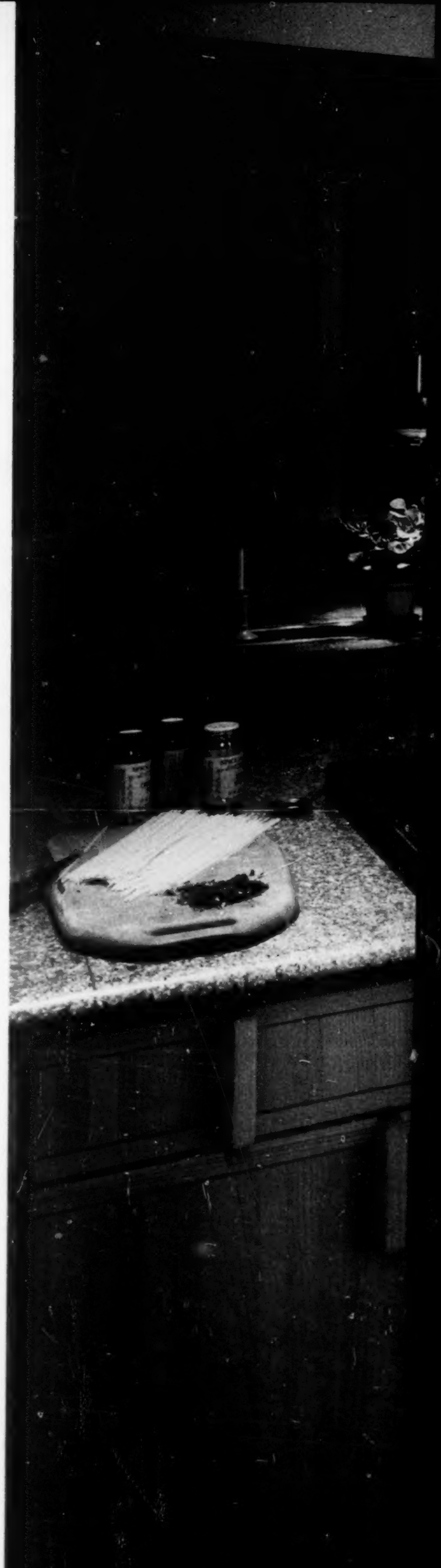
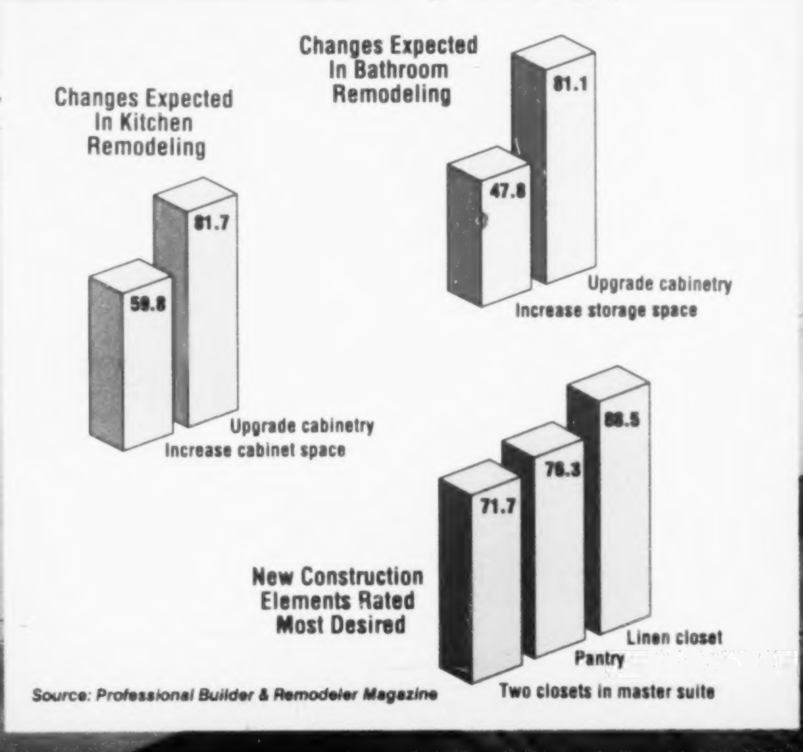


Photo: Roger Turk



Changes Expected In Kitchen Remodeling

Changes Expected In Bathroom Remodeling

New Construction Elements Rated Most Desired

Source: Professional Builder & Remodeler Magazine

An extra-long island provides plenty of storage space in this remodeled Seattle home, built by David Mercer Construction and designed by Jeff Case. Wall cabinets provide a variety of looks including places for wine bottles, open shelves for books and glass-front cabinets.

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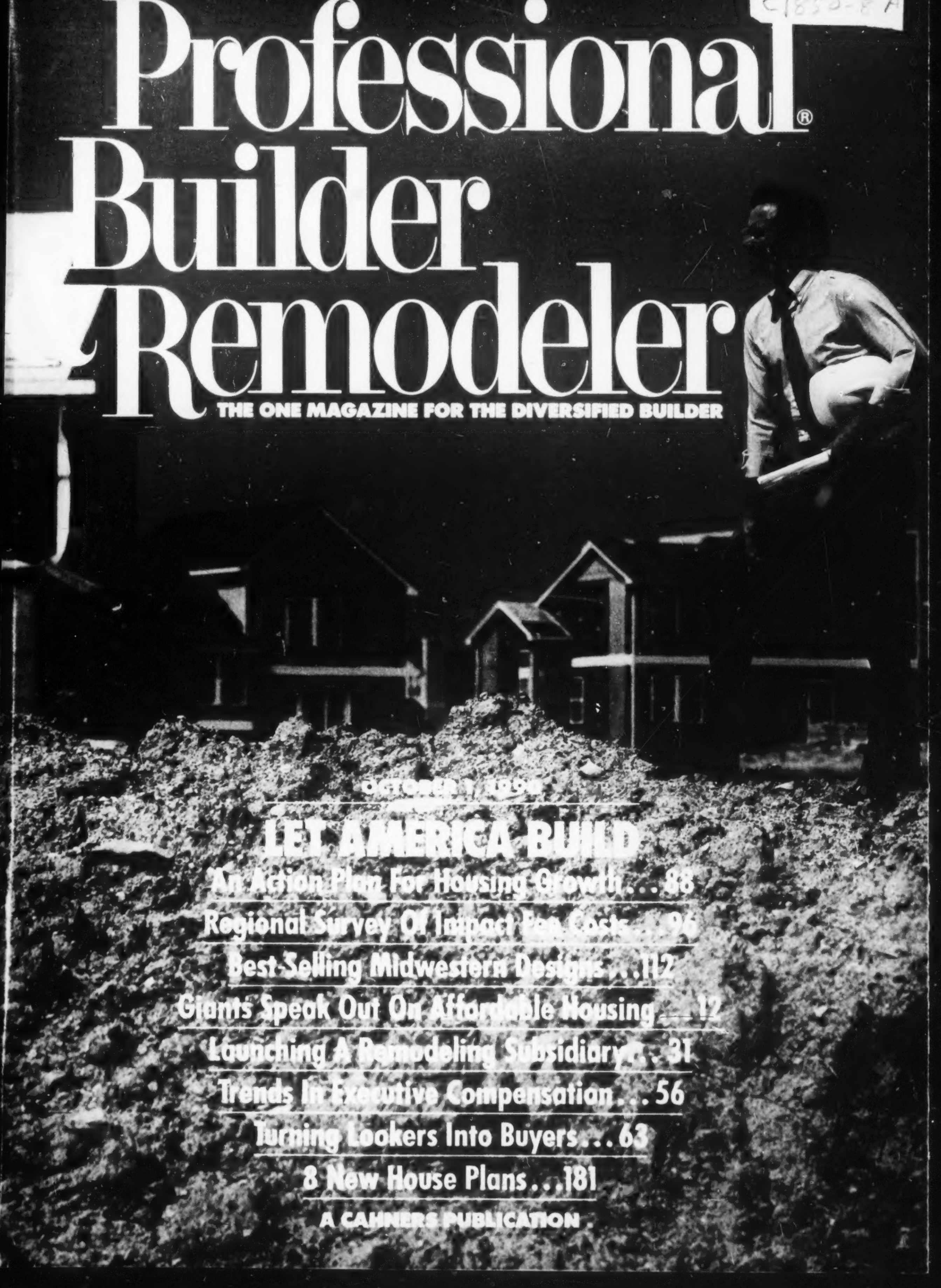

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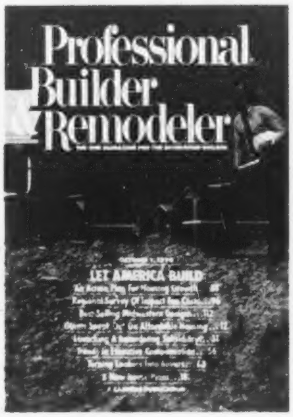

On The Cover

■ With this issue, we introduce the magazine's new name, *Professional Builder & Remodeler*, as well as our redesigned format, intended to add graphic excitement to our issues without changing our basic structure or editorial goals. Cover shot photographed by Marc Berlow, Chicago.

Over 83% of cities surveyed had impact fees: p. 96.

Signs establish a community: p. 69.

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■ Builders are pushing quality control to new heights and aiming for zero defects: *p. 169*. Why demand for "HUD code" homes is booming in California: *p. 170*.

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INDUSTRY ISSUES

Giants Speak Out On Affordable Housing

Who should provide affordable housing in the 1990s? *PB&R* asks the Giants.

The affordability crisis is a serious concern for the nation's largest home builders. In a recent survey by *Professional Builder & Remodeler* magazine, builders on *PB&R's* Giant 400 list ranked affordability barriers to first-time buyers as their third most serious concern about operating in the 1990s.

Nearly 82% of surveyed Giants say their most serious problem is government regulations, followed by environmental and no-growth movements (57.6%). The affordability crisis was cited by 45.5% of respondents.

The biggest share of the burden for providing affordable housing should be borne by the federal government, say 48.5% of respondents. About 18% believe the second largest share should be provided by the home building industry; another 18% say local government ought to shoulder the burden. The third largest share of the burden should be borne by the private sector, according to 15.2% of surveyed Giants.

"It's the responsibility of the building industry," says Gary Garczynski of Long Signature Homes, Woodbridge, Va., "to raise awareness of the need for affordable housing and to work together with all levels of government to develop a plan for managed growth."

Asked to choose from a list of possible solutions to the affordability crisis, 82.8% of responding builders say the loosening of restrictive zoning laws is the most viable, followed by more government funding for new housing programs (51.5%). However, all survey respondents feel a combination of approaches is needed, and some added their own suggestions to the list.

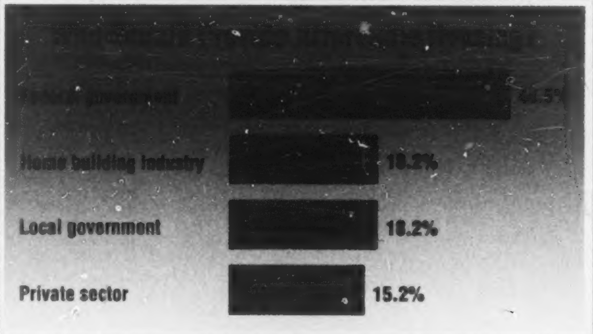
Modifications to the existing tax code would help first-time buyers, such as allowing the use of IRAs for downpayments without incurring a penalty, says Garczynski.

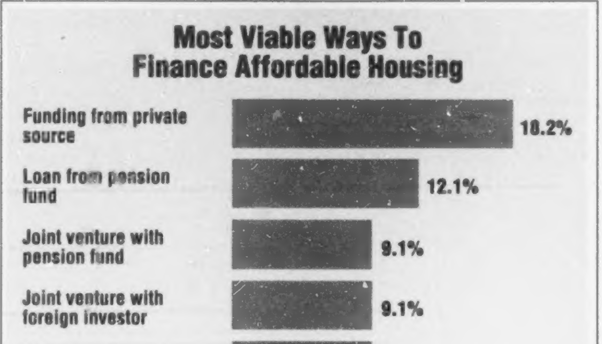
Derek Klutts, Klutts Homes, Charlotte, N.C., firmly believes that manufactured housing is a good way to beat the high cost of housing. "Manufactured homes give you strict cost control," says Klutts. "We've been very successful in educating the consumer about their value."

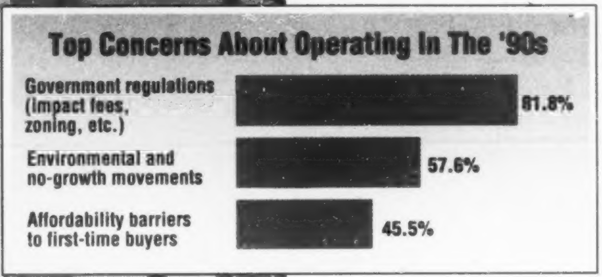
Joe Collins of Stokes-Collins, Jacksonville, Fla., suggests that private developers buy and rehabilitate distressed projects, such as apartment complexes under foreclosure and properties in the hands of the Resolution Trust Corp.

Donald Misrach of The Drees Co., Covington, Ky., says mortgage bond programs would encourage the first-time and first move-up buyer to purchase existing homes, as well as new housing.

About 18% of respondents rank funding from private sources as the most viable financing method for the production of affordable first-time and move-up housing. About 12% say loans from pension funds are the most viable.

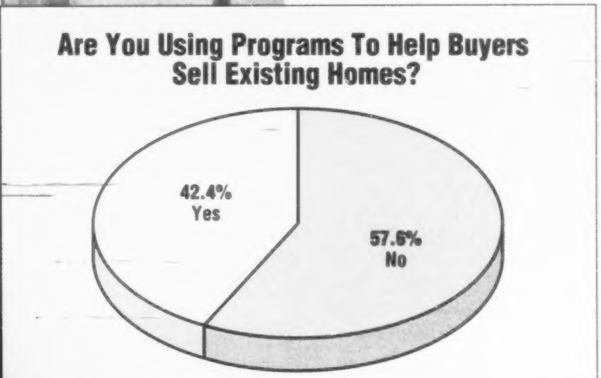




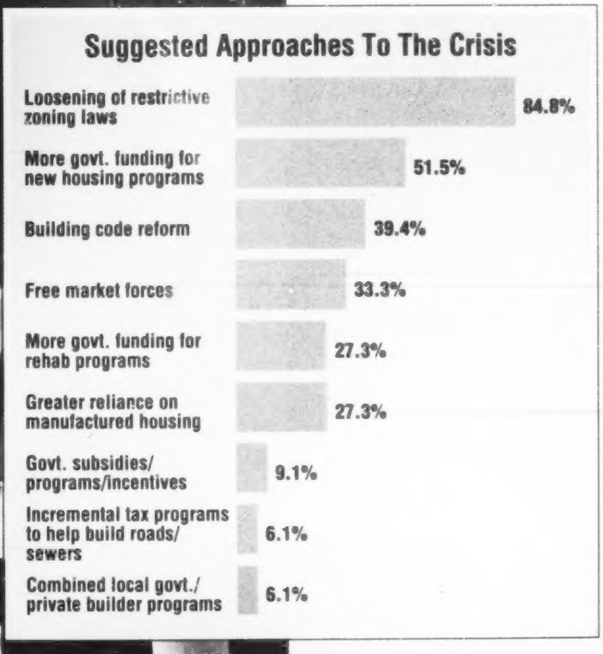


Top Concerns About Operating In The '90s

Government regulations (impact fees, zoning, etc.)
81.8%
Environmental and no-growth movements
57.6%
Affordability barriers to first-time buyers
45.5%



Are You Using Programs To Help Buyers Sell Existing Homes?



Suggested Approaches To The Crisis

■ COMPENSATION

How The Home Building Industry Pays Its Top Managers

A survey of top residential builders reveals changes in executive salaries and bonuses.

In the past 12 months, the earnings of chief operating officers, engineers and top land executives of home building companies have increased significantly.

According to a survey by Lee Stephens & Associates, San Diego, Calif., from 1988 to 1989, total cash compensation for chief operating officers increased by 14%.

The chief operating officer is "creeping up gradually on the chief executive officer," said Lee Stephens. "It's almost as if the old guard (the CEO) is leaving the helm and allowing the COO to take over. I see this happening a great deal in the building industry today."

Top land engineering/development executives showed a 33% increase, while the compensation for civil engineers jumped 25%. The reason is that site work has become more complicated, said Stephens.

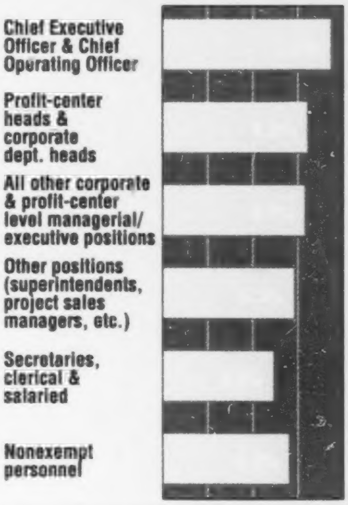
"In Southern California, particularly, we're out of the good ground and into the rocks and hillsides," he said.

In contrast, compensation for sales and marketing executives is down 1% from the year before. Stephens concludes that this is symptomatic of home builders' difficulties in finding good salespeople. He also noted that builders appear to be hiring more people for human resources management.

Long-term incentive compensation, based on sustained results over a period of time (e.g: one to five years), is still a rarity in the residential building industry, according to Stephens. Long-term incentives are greater for CEOs and COOs, for example, than other top managers.

By Susan Bady, Senior Editor

Anticipated Average Merit/ Salary Increase



Source: Lee Stephens & Associates

COOs are beginning to catch up to CEOs on the cash compensation ladder. Top land executives are doing even better; their total compensation is up 33% over last year.

Executive Pay: Who Makes The Most

Corporate Positions	Average Base Salary	Average Annual Bonus	Total Compensation
Chief Executive Officer	$239,000	$304,000	$543,000
Chief Operating Officer	$236,000	$315,000	$551,000
Top Development Exec. (SF)	$136,000	$107,000	$243,000
Top Development Exec. (MF)	$127,000	$52,000	$178,000
Chief Financial Officer	$114,000	$93,000	$207,000
Controller	$69,000	$19,000	$88,000
Top Sales & Marketing Exec.	$81,000	$39,000	$119,000
Top Construction Executive	$83,000	$28,000	$111,000
Top Land Engineering/ Development Exec.	$79,000	$34,000	$113,000
Top Architectural Design Executive	$64,000	$14,000	$77,000
Top Land Acquisition/ Sales Executive	$92,000	$38,000	$130,000
Top Property Management Exec.	$64,000	$15,000	$79,000

Source: Lee Stephens & Associates

Executive Pay: Long Term Incentives

Corporate Positions	Incentive Stock Options	Other Stock Plans	Phantom Stock	Project Equity Participation
Chief Executive Officer	$594,000	$4,433,000	$83,000	$1,638,000
Chief Operating Officer	$321,000	$3,600,000	$63,000	$240,000
Top Development Executive (SF)	$15,000	$1,030,000	—	$181,000
Chief Financial Officer	$70,000	$296,000	$32,000	$77,000
Controller	$38,000	$248,000	$31,000	$36,000
Top Sales & Marketing Exec.	$8,000	$16,000	$83,000	—
Top Construction Executive	$1,000	—	—	—
Top Land Engineering/ Development Exec.	$7,000	$15,000	—	—
Top Architectural Design Executive	—	$6,000	—	—
Top Land Acquisition/ Sales Executive	$149,000	$41,000	$59,000	$70,000
Top Property Management Exec.	$1,000	—	—	—

Source: Lee Stephens & Associates

Executive Pay: Benefits & Perks

Corporate Positions	Company Car or Allowance	All Insurance	Pension & Retirement Plan	Clubs
Chief Executive Officer	$8,000	$17,000	$19,000	$9,000
Chief Operating Officer	$8,000	$9,000	$13,000	$7,000
Top Development Exec. (SF)	$7,000	$10,000	$10,000	$4,000
Top Development Exec. (MF)	$6,000	$4,000	$3,000	$2,000
Chief Financial Officer	$6,000	$12,000	$8,000	$3,000
Controller	$5,000	$7,000	$6,000	$1,000
Top Sales & Marketing Exec.	$6,000	$7,000	$6,000	$2,000
Top Construction Executive	$6,000	$6,000	$6,000	—
Top Land Engineering/ Development Exec.	$6,000	$6,000	$5,000	$1,000
Top Architectural Design Executive	$5,000	$4,000	$4,000	—
Top Land Acquisition/ Sales Executive	$6,000	$9,000	$5,000	$2,000
Top Property Management Exec.	$6,000	$3,000	$1,000	$2,000

Source: Lee Stephens & Associates

Maintaining Organization Morale Critical To Profitability

Home building is a team game. A builder's people must work well together—on tight schedules—or profitability flies out the window.

"Managing money and people are the critical elements of any business," says consultant Martin Freedland, Organizational Development Associates, Atlanta. "But too few builders are tuned in to managing people, and they wind up with morale problems."

Photo: David Barwick

Freedland: "Morale is a management responsibility that starts at the top."

Good morale comes from *training* each level of the organization, from the top down, says Freedland. "You get good managers, and train them in developing the people below them. The first priority of every manager should be to train his replacement."

Builders often violate the hierachy of authority by bossing lower-level employees. "That messes up the relationships of a manager judged by the results

Continued on page 59.

Let America Build

The Importance Of Home Building In America

The need for shelter is prehistoric. The importance of housing as both a public and private asset and therefore of political significance is less ancient.

Official federal recognition of the importance of housing and home ownership in America may be said to date back to the early 1900s when a deduction for mortgage interest was included in the nation's first federal income tax law. During the Great Depression, the creation of federal mortgage insurance further strengthened the recognition of housing as a vital asset well within the scope of federal responsibility.

Following World War II, home building became one of the nation's booming industries and one of its most important economic mainsprings. Home ownership, as Denise DiPasquale of the Harvard Joint Center for Housing studies emphasized in a recent study, "has proven to be the best source of wealth accumulation for the vast majority of American households." More so than in most other countries in the world, home ownership gives Americans a stake in their community and in their country.

The accompanying chart shows the economic impact of the building of a $148,300 new single-family home in 1989. Abandoning its construction would mean:

✓ The local economy will suffer the loss of .627 man years of construction labor;

✓ A ripple effect will run through related industries costing another .897 man years of labor;

✓ The loss of $18,819 in total federal, state and local tax impact that would have otherwise been generated by the house.

How One New Home Impacts The Economy

(Average 1989 new home cost— $148,300)

$58,856	**for building material purchases**
$16,392	**in wages for construction**
$158,155	**in nonresidential building activity generated**
$2,037	**in payments to gas, electric and telephone utilities**
$7,044	**for peripheral first year retail purchases**
$10,322	**in wages from the manufacturing sector**
$9,230	**in wages from wholesaling, transportation, etc.**
$9,880	**in wages from mining, land development, etc.**
$1,597	**in local real estate tax payments**
$11,433	**in federal and state income tax payments**
$3,960	**in federal corporate income tax payments**
$1,829	**in social security tax payments**

Source: Department of Commerce; NAHB Economics Division; Cahners Economics; Bureau of Building Marketing Research.

The home ownership rate in America rose from 44% in 1938 to 65.6% in 1980, according to the U.S. Census Bureau. It fell to 64% in 1989.

Production has declined as well. New financing constraints, a spate of complex new environmental laws, infrastructure problems, increased development costs, higher impact fees and growth moratoria in many areas have impacted housing production, costs and availability.

Residential construction is now expected to drop to 1.2 million units in 1990. That's 220,000 fewer starts than were predicted last December. The ripple effect will be serious.

Through April, the slowdown in 1990 had already reduced output of construction supplies 1.1% below 1989 levels, according to the Federal Reserve. Shipments of major household appliances were reported down 4.1%. Jobs in the lumber and wood products industries were almost 9000 below 1989 levels. In May, employment in the furniture business was already 12,200 jobs below 1989 levels. The cement industry is expecting nearly a 2% drop in shipments in 1990.

A decline in both production and availability cuts into the supply of housing. The "affordability gap" widens, and housing moves from the asset side of the public ledger to the debit side as tax-supported assistance programs are implemented.

The public debate over the nation's housing needs has become a debate over costs—the cost of ownership, of tenancy, of subsidies and assistance programs; the "cost" of revenues lost through tax concessions; and the environmental cost of new development.

The U.S. Department of Commerce recently estimated the percentage of output by various industries generated by new construction. It found that nearly 80% of production in heating, plumbing and structural metal went into new construction; 66% of lumber and wood products; 14.4% of paper products; 12.5% of oil and petroleum; and 10.3% of household furniture.

Others have measured the importance of housing in terms of crime and illiteracy rates, of congestion and mobility problems, and of property rights and values.

Saying "Yes" to the building and upgrading of America's housing is saying "Yes" to the nation's economic strength and security as well as the highest standard of living for its citizens.

PB&R's Exclusive Survey Of Impact Fees And Exactions

The use of impact fees, exactions and exclusionary zoning to manage growth is one of the most serious issues facing local government today. Without addressing this problem effectively, it is questionable whether the affordability crisis can adequately be resolved.

Impact fees are not new. Some towns began collecting "developer contributions" as far back as the 1920s. Initially, they were justified as a way to manage building booms and control sprawl, especially in the Sunbelt and other "growth islands." In recent years, however, the combination of taxpayer revolts, federal aid cutbacks and awareness of local environmental issues has helped foster an antigrowth bias: *Those who "cause" any growth—meaning builders—should be required to pay for it.*

To date, however, impact fees have been viewed primarily as a local problem to be addressed by the local builders association. To gauge the problem as it relates to the affordability crisis in new housing, *Professional Builder & Remodeler* surveyed builders in the top 50 metropolitan markets.

The results of our interviews are summarized in the following "tour" of the country and its top construction markets: it begins in the West, where *every* builder interviewed faced fees and exactions; next is the South (81% report reliance on fees); the North (80%); and finally the East (62%). Each includes an average cost per new home tallying the cumulative effect.

A few caveats are in order. First, most builders operate in several local markets—each with its own rules—so we asked them to describe only the practices of the municipality they are most active in. Also, some builders were reluctant to specifically name their market and listed only a county or township.

Some responses include only what the builder pays and do not include any fees the developer may have been required to make. Likewise, small builders are not treated the same as large builders, and the survey does not reflect these discrepancies.

Unspoken rules also frequently come into play, especially in the area of exactions. For example, there may be no law on the books requiring builders to provide land or amenities, but it is "understood" that as a practical matter, approval is predicated on it.

1990 PB&R Impact Fee Survey

City	Impact Fees/Exactions	Cost Per New Home
Denver area	Does not require an impact fee, although a $10,000 fee is collected by the Denver Water Board. Fees and exactions add an estimated 5% to the selling price of the average home.	$10,000-15,000
Salt Lake City	Requires an impact fee averaging $3500 per housing unit. Estimates that 10% of the fee is dedicated to roads/transportation, 20% to education, 60% to water/sewer and 10% to parks/recreation. Exactions required have included "Greenbelt Areas," land set aside for common use. Fees and exactions add an estimated 10% to the selling price of the average home.	$12,000
Farmington, Utah	Salt Lake City suburb. Requires an impact fee averaging $1000 per housing unit. Estimates that 40% of the fee is dedicated to roads/transportation, 10% to education, 30% to water/sewer, and 20% to parks/recreation. Fees and exactions add an estimated 1.5% to the selling price of the average home.	$1500
Las Vegas	Requires no impact fee. Exactions required have included land, water treatment plants, roads, and fire/police stations. Fees and exactions add an estimated 7% to the selling price of the average home. Exclusionary zoning not considered a problem.	$5000
North Las Vegas	Requires an impact fee averaging $480 per housing unit. Estimates that 20% of the fee is dedicated to roads/transportation and 80% to parks/recreation. No exactions have been required. Fees add an estimated 1% to the selling price of the average home.	$480
Seattle	Requires an impact fee averaging $1000 per housing unit. Estimates 3% of the fee is dedicated to roads/transportation, 5% to education, 20% to water and sewer, 3% to parks/recreation, with the remainder committed to "administration." Fees and exactions add an estimated 2% to the selling price of the average home.	$2000-$3000
Redmond, Wash.	Seattle suburb. Requires an impact fee averaging $7500 per housing unit. Under state rules, fee goes into general funds. Exactions required have included roads plus parks/recreation facilities. Fees and exactions add an estimated 4.5% to the selling price of the average home. To slow growth in some areas, exclusionary zoning requirements stipulate five-acre lot sizes.	$22,500
Portland, Ore.	Requires a "traffic impact fee," averaging $1250 per housing unit, that's dedicated to roads/transportation. Exactions required have included land and roads. Fees and exactions add an estimated 1.5% to the selling price of the average home.	$2000
San Francisco	Requires an impact fee averaging $15,000 per housing unit. Estimates 30% of the fee is dedicated to education, 20% to water and sewer; unsure of the rest. No exactions have been required. Fees add an estimated 3% to the selling price of the average home.	$15,000
Antioch, Calif.	Suburb west of Oakland. Requires an impact fee averaging $17,000 per housing unit. Estimates 10% of the fee is dedicated to roads/transportation, 20% to education, 30% to water and sewer, 10% to parks/recreation, with the remainder going to administration. Exactions have not been required. Fees add an estimated 7%-10% to the selling price of the average home.	$17,000
San Ramon, Calif.	Bay Area suburb. Requires an impact fee averaging $2000 per housing unit. Estimates that 30% of the fee is dedicated to education, 40% to water/sewer and 30% to parks/recreation. Exactions required have included schools. Fees and exactions add an estimated 8%-10% to the selling price of the average home. Exclusionary zoning not considered a problem.	$30,000

1990 PB&R Impact Fee Survey

City	Impact Fees/Exactions	Cost Per New Home
Vacaville, Calif.	Napa Valley city northwest of Bay Area. Requires an impact fee averaging $12,000 per housing unit. Estimates that 20% of the fee is dedicated to roads/transportation, 50% to water/sewer and 30% to parks/recreation. Exactions required have included land and parks/recreation facilities (in lieu of a fee). Fees and exactions add 15% to the selling price of the average home.	$22,000
Sacramento County, Calif.	Some unincorporated areas require an impact fee averaging $9800 per housing unit. Estimates that 9% of the fee is dedicated to roads/transportation, 23% to education, 55% to water/sewer, 1% to parks/recreation, 6% to storm drainage, 3% to permits, 2% to plan check costs and 1% to overhead. Exactions required have included land, schools, parks/recreation facilities and fire/police stations. Fees and exactions add an estimated 10% to the selling price of the average home.	$12,000-$15,000
San Jose, Calif.	Requires an impact fee averaging $25,000 per housing unit. Estimates that 20% of the fee is dedicated to roads/transportation, 10% to education, 20% to water/sewer, 10% to parks/recreation, 20% to processing, 13% to drainage and the rest miscellaneous. Fees and exactions add an estimated 20% to selling price.	$40,000-$50,000
San Jose, Calif.	Requires an impact fee averaging $10,000 per housing unit. Estimates that 25% of the fee is dedicated to roads/transportation, 35% to education, 20% to water/sewer and 20% to parks/recreation. Exactions required have included land, water treatment plants, roads and primarily parks/recreation facilities. Fees and exactions add an estimated 10%-20% to the selling price of the average home. On certain sized lots, construction may not cover more than 28% of the property.	$30,000-$60,000
Campbell, Calif.	San Jose suburb. Requires an impact fee averaging $13,000 per housing unit. Estimates that 20% of the fee is dedicated to roads/transportation, 30% to education, 15% to water/sewer and 35% to parks/recreation. Exactions have not been required. Fees add an estimated 3.5% to the selling price of the average home.	$13,000
North Los Angeles County, Calif.	Some areas require an impact fee averaging $10,000 per housing unit. Estimates that 10% of the fee is dedicated to roads/transportation, 24% to education, 48% to water/sewer, and 18% miscellaneous. Exactions required have included land, water treatment plants, roads, schools, parks/recreation facilities, sewer treatment plants, fire/police stations and medical buildings. Fees and exactions add an estimated 7% to the selling price of the average home. Zoning requires two units/acre.	$13,000
Los Angeles County	Requires an impact and development fee averaging $20,000 per housing unit. Estimates that 20% of the fee is dedicated to roads/transportation, 20% to education, 40% to water/sewer and 20% to parks/recreation. Fees and exactions add an estimated 12% to the selling price of the average home.	$20,000
Orange County, Calif.	Requires an impact fee as high as $18,000 per housing unit. Estimates 60% of the fee is dedicated to roads/transportation, 20% to education, 20% to parks/recreation. Fees and exactions add an estimated 10% to the selling price of the average home. Zoning requirements stipulate 7200-square-foot minimum lots.	$15,000-$20,000
South Orange County, Calif.	Unincorporated areas require development fees averaging $5000-$13,000 per housing unit. Estimates that 20%-25% of the fee is dedicated to roads. Exactions required have included land, roads and parks/recreation. Fees and exactions add an estimated 20%-40% to the selling price of the average home. Zoning requirements usually stipulate one acre lot sizes.	$20,000
La Quinta, Calif.	Part of Riverside County. Requires an impact fee averaging $30,000 per housing unit. Estimates 10% of the fee is dedicated to roads/transportation, 15% to education, 10% to water/sewer, while the rest covers processing and inspections. Fees and exactions add an estimated 15% to the selling price of the average home. Exclusionary zoning not considered a problem.	$30,700
Temecula, Calif.	Located 40 miles north of San Diego. Requires an impact fee ranging from $4000-$16,000 per housing unit. Estimates that 20% of the fee is dedicated to roads/transportation, 50% to education, 20% to water/sewer, 5% to parks/recreation and 5% to miscellaneous uses. Fees and exactions add an estimated 7%-8% to the selling price of the average home.	$12,000
Escondito, Calif.	Suburb north of San Diego. Requires an impact fee averaging $18,000 per housing unit. Estimates that 20% of the fee is dedicated to water/sewer and 80% to parks/recreation. Exactions have not been required.	$18,000
Fallbrook, Calif.	Suburb north of San Diego. Requires an impact fee averaging $1100 per housing unit. Exactions have not been required. Fees add an estimated 1.5% to the selling price of the average home.	$1100
Maui County, Hawaii	Requires an impact fee averaging $3000 per housing unit. Estimates that all of the fee is dedicated to water/sewer. Exactions required have included access roads and bridges, schools, flood facilities or cash equivalent. Fees and exactions add an estimated 2% to the selling price of the average home. Exclusionary zoning not considered a problem.	$5000
Phoenix	Outside central city, impact fees average $3000-$5000 per housing unit. Estimates 15% of the fee is dedicated to roads/transportation, 70% to water/sewer, 5% to parks/recreation and 10% to general services. Fees and exactions add an estimated 3%-10% to the selling price of the average home. Zoning requirements include caps on density (4/acre).	$5000-$10,000
Peoria, Ariz.	Phoenix suburb. Requires an impact fee averaging $1000 per housing unit. Estimates 10% of the fee is dedicated to roads/transportation, 10% to education, 40% to water/sewer, 20% to parks/recreation and 20% to city services. Fees and exactions add an estimated 5% to the selling price of the average home.	$3000
Oklahoma City	Requires an impact fee averaging $200 per housing unit. Estimates all of the fee is dedicated to water/sewer. Exactions required have included roads. Fees and exactions add less than 1% to the selling price of the average home.	NA
Moore, Okla.	Suburb of Oklahoma City. Requires an impact fee averaging $500-$840 per housing unit. Estimates 60% of the fee is dedicated to water/sewer; unsure of the rest. Exactions required have included land, water treatment plants, roads and sewage treatment plants. Fees and exactions add an estimated 1% to the selling price of the average home.	$500-$840
Dallas	Requires no impact fee or exactions. Exclusionary zoning not considered a problem.	NA
Keller, Texas	Dallas suburb. Requires an impact fee averaging $2800 per housing unit. Estimates 50% of the fee is dedicated to roads/transportation; unsure how the remainder is used. Exactions have not been required.	$2800
Austin, Texas	Requires "recovery" fee averaging $3000 per housing unit. Estimates all of the fee is dedicated to water/sewer. Exactions have not been required. Fees and regulations add an estimated 8% to the selling price of the average home.	$3000
Austin, Texas	Requires no impact fee or exactions. Environmental considerations (retaining "green spaces") are key.	NA
Clearlake City, Texas	Houston suburb. Requires no impact fee. Exactions required have included land, water treatment plants, roads, schools, parks/recreation facilities, sewer treatment plants, libraries, fire/police stations and medical buildings. Fees and exactions add an estimated 20%-25% to the selling price of the average home. Exclusionary zoning not considered a problem.	$10,000-$15,000
Ft. Worth, Texas	Requires no impact fees or exactions. Exclusionary zoning not seen as a problem.	NA

1990 PB&R Impact Fee Survey

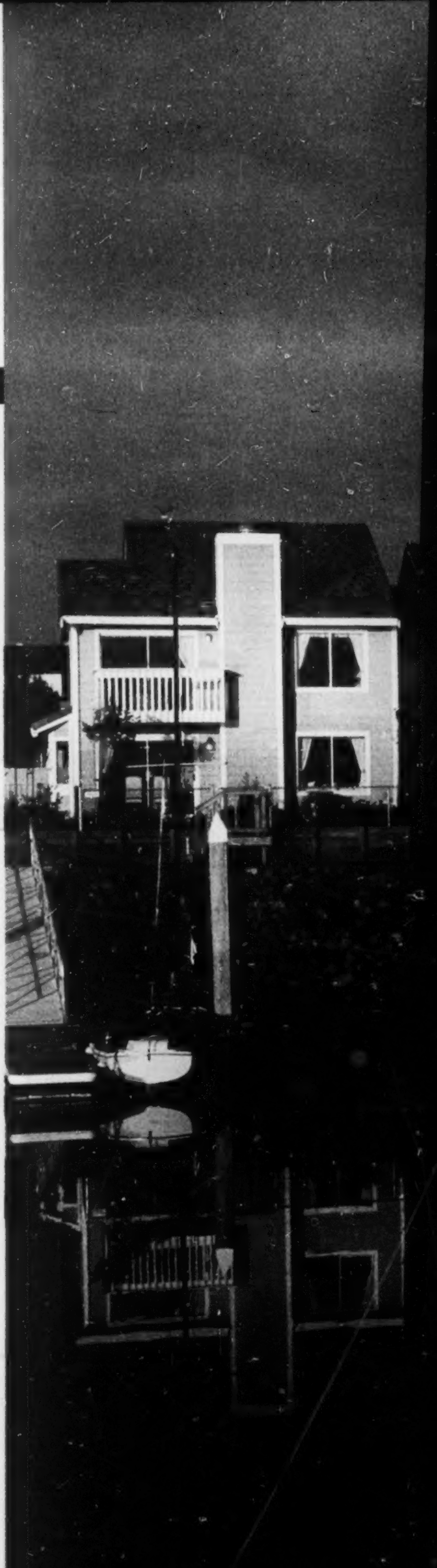
City	Impact Fees/Exactions	Cost Per New Home
Highland Shores, Texas	Houston suburb. Requires an impact fee averaging $1200 per housing unit. Estimates 10% of the fee is dedicated to roads/transportation, 20% to education, 60% to water/sewer and 10% to parks/recreation. No exactions have been required. Fees add an estimated 1% to the selling price of the average home.	$1200
Atlanta	Requires no impact fee. Exactions required have included land, roads, schools, parks/recreation facilities.	NA
College Park, Ga.	Atlanta suburb. Requires an impact fee, although figures were unavailable. Exactions required have included land, roads and parks/recreation facilities. Fees and exactions add an estimated 1%-2% to the selling price of the average home. Zoning requirements stipulate 8-12 units per acre.	$2000
Memphis	Does not require impact fee, although developers must pay a variety of fees for electricity, gas and water hookups. Exactions have not been required.	NA
Shelby County, Tenn.	Memphis metro area. Does not require an impact fee. Exactions required have included land. Exactions add an estimated .3% to the selling price of the average home. Exclusionary zoning requirements exist.	$300-$500
Brentwood, Tenn.	Nashville suburb. Requires an impact fee averaging $2500 per housing unit. Exactions required have included land and roads. Fees and exactions add an estimated 2%-3% to the selling price of the average home. The Nashville area is operating under a masterplan that was developed years ago. Some areas have tough restrictions.	$3000-$4500
Hendersonville, Tenn.	Nashville suburb. Requires no impact fee; water and sewer fees have gone up. Exactions required have included land, water treatment plants and sewage treatment plants. Fees and exactions add an estimated .5% to the selling price.	$400
Laplace, La.	New Orleans suburb. Requires no impact fee or exactions, although they are currently under consideration. Minimum lot size is 5000 square feet, creating a density cap of 7 units per acre. However, there is no cap for multistory multifamily.	NA
Hillsborough County, Fla.	Tampa is county seat. Requires an impact fee averaging $7000 per housing unit. Estimates that 15% of the fee is dedicated to roads/transportation, 2% to education, 78% to water/sewer, 4% to parks/recreation and 1% to fire protection. Exactions required. Fees and exactions add an estimated 9% to the selling price of the average home.	$9000
Clearwater, Fla.	Tampa/St. Petersburg suburb. Requires an impact fee, although amount varies by site. Exactions not required.	NA
Ocoee, Fla.	Orlando suburb. Requires an impact fee averaging $4000 per housing unit. Estimates that 25% of the fee is dedicated to roads/transportation, 70% to water/sewer, 2.5% to parks/recreation and 2.5% to law enforcement/services. Exactions required have included land and roads. Fees and exactions add an estimated 6% to the selling price of the average home.	$6000
Palm Beach County, Fla.	Requires an impact fee averaging $4600 per 2000-square-foot housing unit. Estimates that 36% of the fee is dedicated to roads/transportation, 20% to education, 13% to water/sewer, 20% to parks/recreation, 2% to libraries and 2% to law enforcement. Exactions required have included land, water treatment plants, roads and parks/recreation facilities. Fees and exactions add an estimated 15% to the selling price of the average home.	$20,000
Palm Beach County	Requires an impact fee. Estimates that 60% of the fee is dedicated to roads/transportation, 10% to education and 30% to parks/recreation. Fees and exactions add an estimated 30% to the selling price of the average home. Zoning requirements stipulate lot minimums ranging from an acre up to five acres.	$20,000
South Palm Beach County, Fla.	Unincorporated areas require impact fees averaging $6970 per housing unit. Most fees based on square footages. Estimates that 24% of the fee is dedicated to roads/transportation, 13% to education, 43% to water/sewer, 14% to parks/recreation, 2% to libraries and 1% to law enforcement. Exactions required include land, roads and parks. Fees and exactions add an estimated 4% to the selling price of the average home. Respondents say proving "concurrency" takes at least a month for every parcel.	$10,000
Parkland, Fla.	In Broward County. Requires an impact fee averaging $2000-$3000 per housing unit. Estimates that half the fee is dedicated to roads/transportation, the rest to water/sewer. Acre-size lot minimums in same areas.	NA
Sweetwater, Fla.	Miami suburb. Requires an impact fee averaging $2860 per housing unit. Estimates that 37% of the fee is dedicated to roads/transportation, 56% to water/sewer and 7% to law enforcement. Exactions have not been required. Fees add an estimated 2% to the selling price of the average home.	$2860
South Florida	Requires impact fees averaging $3000-$5000 per housing unit. Estimates that 25% of the fee is dedicated to roads/transportation, 50% to water/sewer and 25% to parks/recreation. Fees and exactions add an estimated 15% to the selling price of the average home. Exclusionary zoning requirements stipulate one-acre lot minimums.	$5000
Cincinnati	Requires an impact fee averaging $3000-$5000 per housing unit. Estimates 20% of the fee dedicated to roads/transportation, 20% to education, 20% to water/sewer and 40% to parks/recreation. Exactions not required. Fees add an estimated 2% to the selling price of the average home. Exclusionary zoning not considered a problem.	$3500
Clermont County	Suburban Cincinnati. Does not require impact fees or exactions.	NA
Franklin, Ohio	Suburban Cincinnati. Impact fees not yet imposed. Exactions required have included land, roads, schools and parks/recreation facilities. Unsure how much exactions add to the selling price of the average home.	NA
Columbus, Ohio	Does not require an impact fee. Exactions required have included land and roads, although builders also put in all streets, sewers and water, plus bridges and streetlights in some cases. Exactions add an estimated 10% to the selling price of the average home. Zoning mandates half-acre lot minimums in many areas.	$15,000
Broadview Heights	Cleveland suburb. Does not require impact fees. Exactions required have included land, water treatment plant, roads, parks/recreation facilities and sewage treatment plants. Exactions add an estimated 2.5% to the selling price of the average home. Zoning requirements stipulate half-acre lot minimum.	$5000-$6000
Independence, Ohio	Cleveland suburb. Requires an impact fee averaging $1200-$1800 per housing unit. Estimates that 7% of the fee is dedicated to roads/transportation, 50% to education, 8% to water/sewer, 10% to parks/recreation and 25% to city administration. Exactions have not been required. Fees add an estimated 3% to the selling price of the average home. Zoning requirements stipulate 250-foot-minimum lot depths.	$1200-$1800
Novi, Mich.	Detroit suburb. Does not require impact fees or exactions. Recently lowered density maximum from 12 units per acre to 6.5.	NA
Oakland County	Detroit suburb. Does not require impact fee or exactions.	NA

1990 PB&R Impact Fee Survey

City	Impact Fees/Exactions	Cost Per New Home
Carmel, Ind.	Indianapolis suburb. Requires an impact fee averaging $1000 per housing unit. Estimates that entire fee is dedicated to water/sewer. Builders not subject to exactions, although developers are. Fees and exactions add an estimated .3% to the selling price of the average home. Minimum lot sizes set on case-by-case basis.	$1000
Fishers, Ind.	Indianapolis suburb. Requires an impact fee averaging $750-$850 per housing unit. Estimates most of the fee is dedicated to water/sewer, although system is still evolving. Exactions (on purely unspoken basis) have included land, roads, schools and parks/recreation facilities. Fees and exactions add an estimated 2%-3% to the selling price of the average home.	$2000-$3000
Lansing, Kansas	Suburb of Kansas City. Does not require an impact fee, but permits were boosted from $340 to $800 per house. Exactions required have included land, roads; sewage treatment plant may be a possibility. Fees and exactions add an estimated .5%-.75%.	$500-$750
St. Peter, Mo.	St. Louis suburb. Requires an impact fee averaging $750 per housing unit. Estimates all of the fee is dedicated to water/sewer. Exactions not required. Fees add 1% to the selling price. Zoning mandates 7500-square-foot lots.	$750
O'Fallon, Ill.	St. Louis suburb. Does not require impact fee. Exactions add 1% to the selling price of the average home.	$2000
Joliet, Ill.	Does not require impact fees or exactions, although they are being considered.	NA
Sherwood, Ill.	Near Joliet, Ill. Does not require impact fee. Exactions required have included land and parks/recreation facilities. Fees and exactions add an estimated 10% to the selling price of the average home. Exclusionary zoning not considered a problem.	$3500
Chicago	Does not require impact fee. Exactions required have included land and parks/recreation facilities.	NA
St. Charles, Ill.	Far-west Chicago suburb. Requires an impact fee averaging $2000 per housing unit. Estimates 60% of the fee is dedicated to education and 40% to parks/recreation. Exactions required have included land, roads and parks/recreation facilities. Fees and exactions add an estimated 5% to the selling price of the average home. Exclusionary zoning is not seen as a problem.	$6000-$7000
Naperville, Ill.	Far-west Chicago suburb. Requires an impact fee averaging $17,079 per housing unit. Estimates 10% of the fee is dedicated to roads/transportation, 35% to education, 20% to water and sewer and 35% to parks/recreation. Exactions required have included land, roads and parks/recreation facilities. Zoning requires minimum lot sizes of 12,000 square feet.	$17,629
Schaumburg, Ill.	Far-north Chicago suburb. Does not require impact fee. Exactions required have included land and parks/recreation facilities.	NA
Barrington, Ill.	Far-north Chicago suburb. Does not require impact fee. Exactions required have included land, water treatment plant and parks/recreation facilities. Fees and exactions add an estimated 4% to the selling price of the average home. Exclusionary zoning requirements stipulate lot sizes of five acres or more.	$5000
Lake Geneva, Wis.	South of Milwaukee. Does not require impact fee. Exactions required have included land and roads. Exactions add an estimated 6%-7% to the selling price of the average home. Exclusionary zoning not considered a problem.	$2000-$4000
Pewaukee, Wis.	Milwaukee suburb. Requires an impact fee averaging $1500-$2000 per housing unit. Respondent estimates that most of the fee is dedicated to water/sewer. Exactions required have included land and parks/recreation facilities. Fees and exactions add an estimated 1%-2% to the selling price of the average home. Local rules limit multifamily rental to 4 units per acre.	$2000-$3000
Dakota County, Minn.	Suburban St. Paul. Requires impact fees, although details unavailable.	NA
Apple Valley, Minn.	Suburban St. Paul. Impact fees not required. Exactions required have included land, parks/recreation facilities or the cash equivalent. Fees and exactions add an estimated .3% to the average home (respondent builds luxury homes).	$1000-$1200
Boston	Requires no impact fees or exactions.	NA
Clarence, N.Y.	Buffalo suburb. Requires an impact fee averaging $600 per housing unit. Estimates that all of the fee is dedicated to parks/recreation. Exactions have not been required, although respondent has donated land to counter no-growth attitudes. Fees add an estimated .2% to the selling price of the average home. Minimum frontage must be 100 feet.	$600
Amherst, N.Y.	Township outside Buffalo. Requires an impact fee averaging $4000 per housing unit. Estimates 40% of the fee is dedicated to water/sewer, 15% to parks/recreation, remainder to miscellaneous requirements such as geological tests. Exactions not required. Fees add an estimated 2.5% to the selling price of the average home.	$4000
New York City	Requires an impact fee averaging $8000-$9000 per housing unit. This respondent has not been subject to exactions. Fees add an estimated 2% to the selling price of the average home. Zoning requirements not considered exclusionary.	$8000-$9000
Hardiston, N.J.	Northern part of state. Does not require impact fees or exactions. Exclusionary zoning not considered a problem.	NA
Mansfield, N.J.	Northern part of state. Requires an impact fee averaging $1000-$4000 per housing unit. Estimates 1% of the fee is dedicated to roads/transportation, 1% to education, 80% to water/sewer and 18% to parks/recreation. Fees and exactions add an estimated 35% to the selling price of the average home. Minimum lot size is ¾ acre.	$5000
Montgomery, Md.	Northwest of Washington, D.C. Requires no impact fees or exactions.	NA
Annapolis, Md.	Requires an impact fee averaging $3200 per housing unit. Does not require any exactions. Fees add an estimated 1% to the selling price of the average home. Waterfront area zoning is considered overly restrictive and permit process is long.	$3200
Towson, Md.	Baltimore suburb. Requires no impact fee. Exactions required have included land, roads, libraries and fire/police stations. Exactions add an estimated 5% to the selling price of the average home. Zoning requirements vary.	$2000-$7000
Philadelphia	Requires no impact fees or exactions.	NA
Buck County, Pa.	Philadelphia suburb. Requires an impact fee averaging $8000 per housing unit. Estimates 25% of the fee is dedicated to roads/transportation, 5% to education, 50% to water/sewer, 10% to parks/recreation and 10% for administration. Fees and exactions add an estimated 10%-12% to the selling price of the average home.	$8000-$10,000
Pittsburgh	Requires no impact fees or exactions. Zoning requirements not considered exclusionary.	NA

Let America Build

☑ Say Yes To Strong Government Housing Support



The collapse of the domestic thrift industry, the frantic attempt by a nervous Congress to shore up what was left with tough new constraints, and the lingering air of uncertainty and caution in the financial markets have combined to cut off a favored source of acquisition, development and construction (AD&C) loans for home builders.

The Financial Institutions Recovery, Reform and Enforcement Act (FIRREA) forced S&Ls to diversify their portfolios (in the past, some thrifts quite legally served a single AD&C borrower) and seek a broader range of new customers. As a result, builders—many of whom had impeccable credit histories—found that almost overnight, longstanding financial relationships were severed.

Faced with this new credit crunch, builders must seek alternatives—new sources of financing and new funding alliances.

For some, the answer lies in new partnerships with major developers. Others may look to commercial banks, foreign investors, pension funds, large equity funds or private investors who might see project financing as a good hedge against inflation.

In any case, many investment counseling firms, such as Kenneth Leventhal & Co. and McMorgan & Co., point out that no matter how they are financed, builders and developers will have to increase substantially their own equity in projects. A hard look at a builder's internal operations, perhaps by an independent analyst, can find idle capital or pinpoint nonessential functions, excess staffing and outright waste.

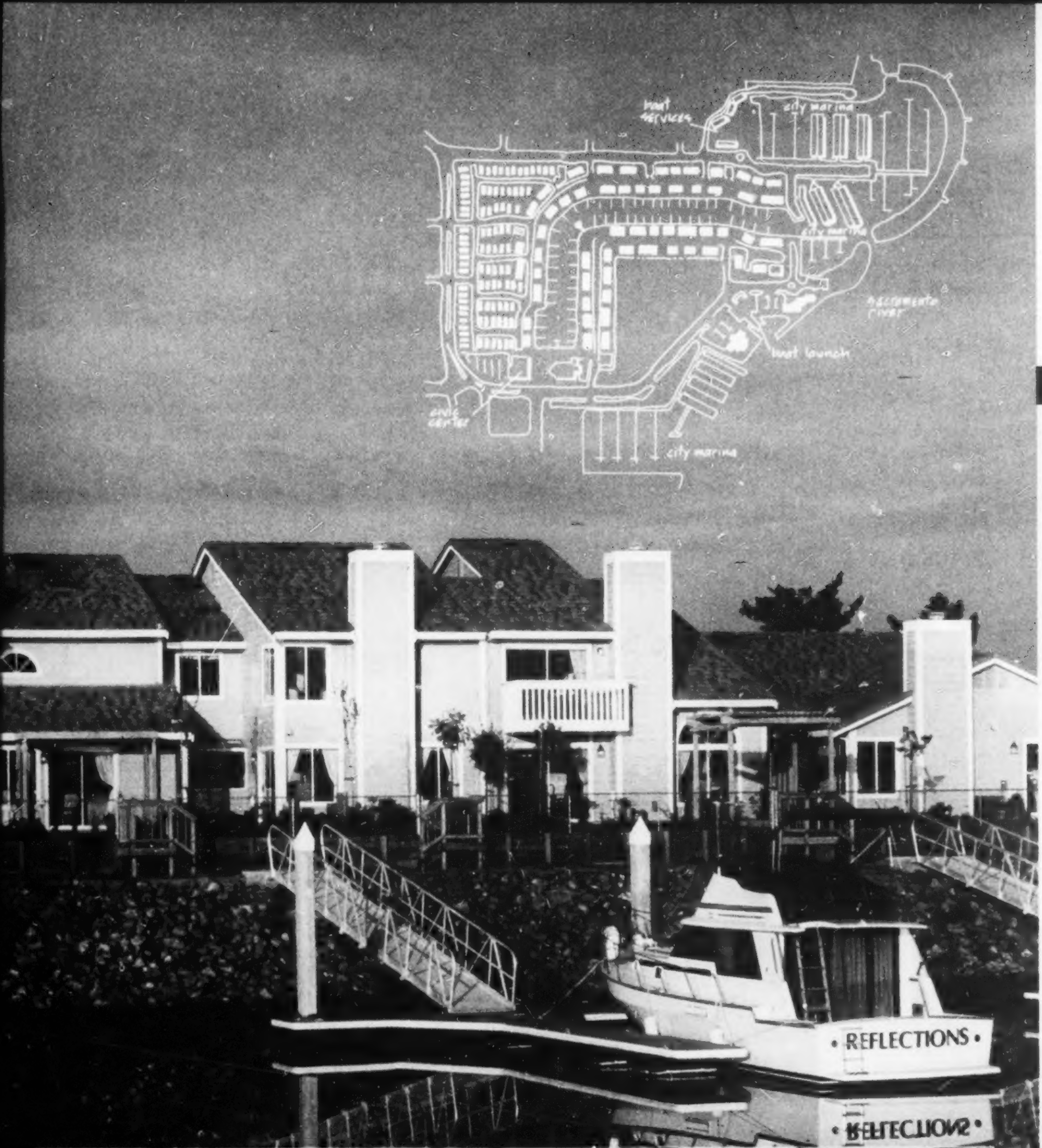
McMorgan estimates that all private U.S. pension funds now total one trillion dollars. The company has designed a program to invest building trades' pension funds in real estate, and already has some $300 million tied up in single-family home development alone.

Though such programs have the added luster of job creation, McMorgan CEO Tom Morton says less than 5% of building trades' funds are invested in real estate development. The main reason, he explains, is that pension fund managers lack real estate expertise. They, like other lenders and investors, need to be convinced not only that the return will match that of alternative investments, but that it is safe.

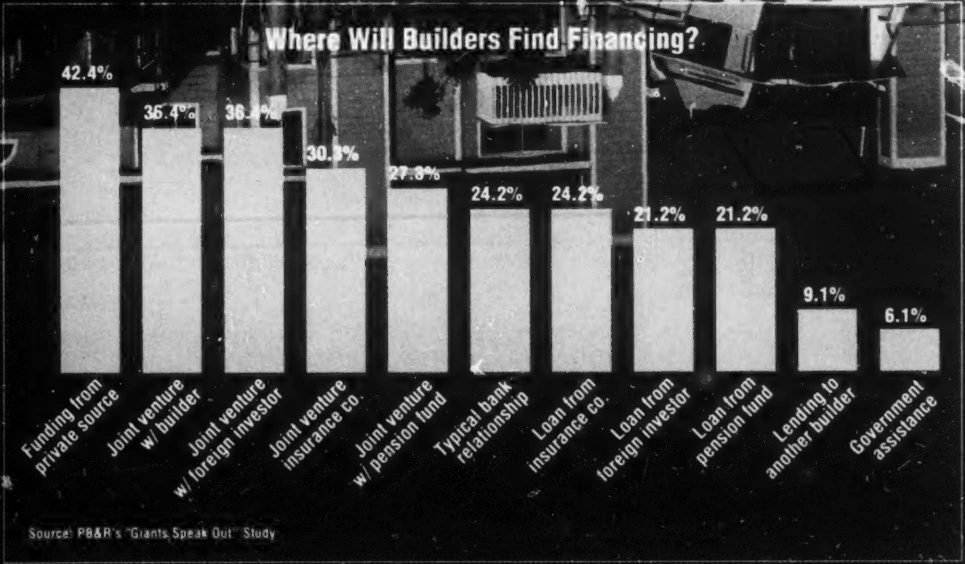
Lack of expertise is also blamed for the delay in creating a secondary market for AD&C loans, although Fannie Mae and Freddie Mac are committed to developing one.

Foreign investors, such as the Japanese, are circumspect in evaluating markets and managements. Analysts, such as Goodkin Real Estate Consulting Group, point out many Japanese favor direct involvement in ventures with builders, requiring both substantial equity and efficient management for long-term relationships.

Therein lies the challenge: Tapping alternative sources of any kind is going to mean a lot more paperwork and a lot more "hands on" management for residential builders and developers. And in their efforts to rebuild a strong financial support system for housing, they will need the cooperation of all Americans.


boat services
city marina
city marina
sacramento river
boat launch
civic center
city marina
• REFLECTIONS •

Whitecliff Homes' Marina Park on California's Sacramento River was financed with building trades' pension funds invested by McMorgan & Co. The 164 townhome and detached units are priced from $14,000 to $250,000.



Source: PB&R's "Giants Speak Out" Study

Builders surveyed by *PB&R* indicate the range and scope of alternative sources and arrangements for AD&C financing.

INDICATORS

Remodeling Up; Construction Lags

Anticipated recovery in new construction aborted by Middle East developments.

By any measure, new residential construction activity through the first seven months of 1990 was disappointing. Despite interest rates that held at levels comparable to 1988-1989, total starts continued to plummet.

Through the first seven months of 1990, single-family starts were 6.4% behind the 1988 pace, while multifamily starts were off 18%. However, a look at dollars spent on residential construction paints a less discouraging picture. The value of new residential construction put in place through July was down a modest 2.2% from the year-ago pace, suggesting that fewer but larger, more well-appointed homes are being built. Spending on multifamily construction is off 11.1%, but dollars spent on single-family construction are off a negligible 0.2%.

The recovery in residential construction that was building earlier in the summer was stopped short by the economic fallout from Iraq's invasion of Kuwait. Inflation fears triggered by higher oil prices drove up interest rates. More importantly, consumer confidence plummeted dramatically and prospective home buyers and home builders adopted a "wait-and-see" attitude. It is now difficult to foresee any sustainable upturn in residential construction until late this year or early in 1991.

Demand High For Comfortable, Spacious Homes

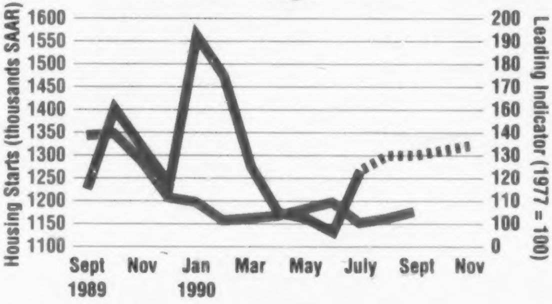
The Commerce Department recently released its annual report detailing the characteristics of 1989's new homes. The average size of new homes constructed in the U.S. last year exceeded 2000 square feet for the first time on record.

Survey data shows that the 1,026,000 new single-family homes completed during 1989 averaged 2035 square feet of finished floor space, up from 1995 square feet last year. That makes the average home completed in 1989 14% larger than those built in 1985. Average house size has now increased for seven consecutive years.

Nationally, 44% of all new one-family homes completed during 1989 contained 2½ or more bathrooms, up from only 29% in 1985.

By Daryl Delano, Cahners Economics

PB&R Leading Indicator

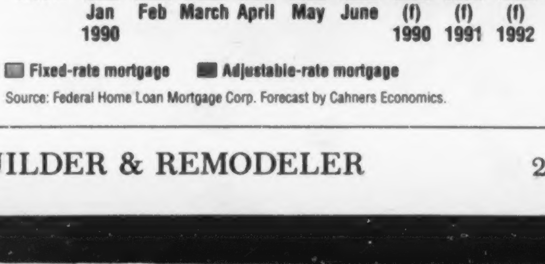


Broken line denotes forecast. Leading Indicator of Housing predicts short-term changes in residential construction over approximately the next quarter. Latest figure is based on September data and includes the Standard and Poor's h-b stock index, 90 day T-bills, bank reserves, consumer confidence index and the ratio of homes for sale to those sold. Prepared exclusively for PB&R by Cahners Economics.

Regional Market Conditions
(Year-to-Date Trends)

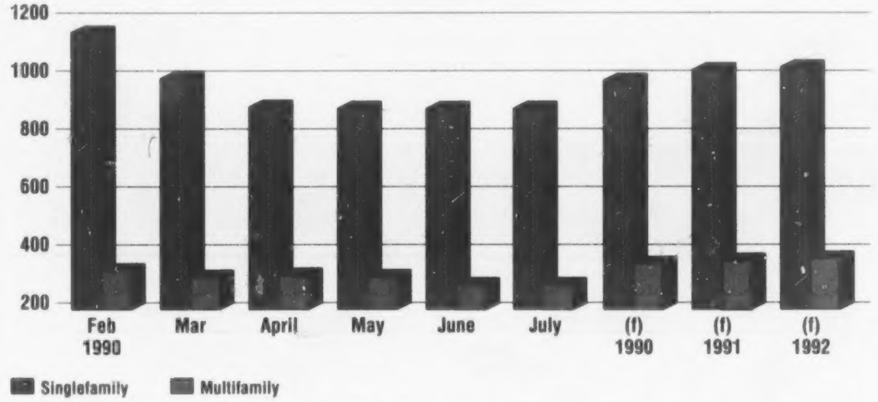
	S-F Home Permit $	Average S-F Permit Value	Remodeling Permit $	Employment Change
Boston	-18.6%	$110,164	-16.4%	-1.6%
Philadelphia	-18.6%	$79,331	+6.7%	+0.5%
Atlanta	-4.4%	$78,307	-22.9%	+3.4%
Memphis	+7.0%	$82,830	-4.2%	+1.3%
Dallas	+13.9%	$107,054	+24.5%	+1.2%
Cincinnati	+13.0%	$91,341	-21.4%	+3.8%
Minneapolis	+3.3%	$102,802	+4.5%	+2.4%
Denver	+16.1%	$114,575	+0.3%	+1.7%
Los Angeles	+30.4%	$134,712	+8.9%	+1.9%

Mortgage Interest Rates



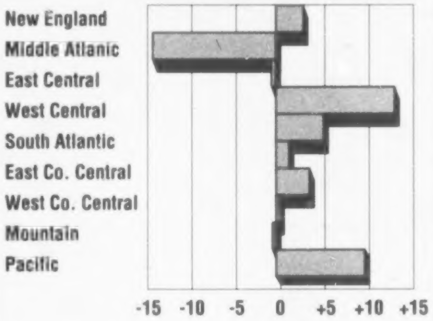
Source: Federal Home Loan Mortgage Corp. Forecast by Cahners Economics.

Housing Starts



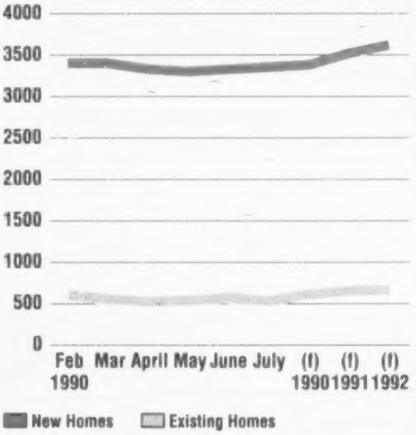
Data in thousands of units. Source: Commerce Dept. Forecast by Cahners Economics

Regional Remodeling Trends
(Year-to-Date) 1990 vs. 1989



Source: U.S. Department of Commerce

New & Existing Home Sales



Data in thousands of units. Source: Commerce Dept. Forecast by Cahners Economics.

Building Materials Price Outlook

	Over-the-Year % Change		
	1989	1990 (f)	1991 (f)
All Materials	3.3%	2.6	3.6
Builders' Hardware	4.4%	2.5	3.8
Ceramic Tile	2.3%	2.9	2.8
Common Brick	0.9%	3.7	2.8
General Millwork	4.9%	3.8	4.0
Gypsum Products	-2.6%	0.1	4.3
Lighting Fixtures	4.9%	2.2	3.4
Lumber	3.0%	4.7	5.0
Plumbing Fixtures	7.0%	5.6	5.7
Prepared Paints	6.4%	4.3	3.5
Strip Shingles	-0.1%	-1.5	1.9

Source: U.S. Department of Labor
Forecast by Cahners Economics.

Key Trends At A Glance

	October 1989	July 1990
Housing Starts (SAAR)	1,423,000	1,148,000
New Home Sales (SAAR)	636,000	548,000
Median New Home Price	$123,000	$121,000
Fixed Rates Mortgage	9.95%	10.02%
Remodeling Permit Trend	-1.00%	+3.10%
Consumer Confidence (1985=100)	117	103.5
Construction Wage Trend	+2.40%	+1.50%

Remodeling Spending Hits All-Time High

While new construction activity was languishing, consumer spending on residential improvements surged to a record high in the first three months of this year. This was a welcome sign in the remodeling sector following a flat 1989.

Total spending on improvements, repairs and maintenance was at an annualized rate of $114.1 billion during the January-March period, more than 16% above the rate recorded in the first quarter of 1989. Spending on "improvements" (remodeling work involving additions, alterations, conversions and building system replacements) rose to an annualized rate of $68.0 billion during the first three months of 1990, up sharply from the $57.8 billion rate seen in the final nine months of 1989.

Attention Framers: Denver Needs You

For whatever reason, the long moribund Denver housing market is reviving. Framers there are in extreme short supply.

"We're really starting to crank," says builder George S. Writer Jr. "Our sales are triple what we thought they would be."

Denver newspapers are running 35 to 40 classified ads a day for framers, said Writer. "Builders are even advertising the rates they'll pay."

The message for those framers who left in 1987 . . . come home.